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Technical Memorandum 33-523

Volume III

*Tracking and Data System Support for the
Mariner Mars 1971 Mission*

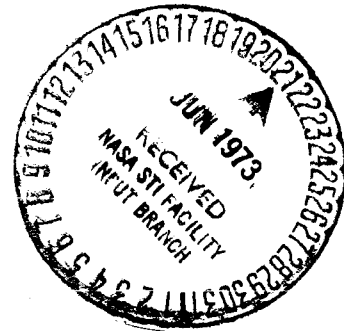
*Orbit Insertion Through End of
Primary Mission*

P. W. Barnum

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G. P. Textor

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PREFACE

The work described in this report was performed by the Tracking and Data Acquisition organizations of the Jet Propulsion Laboratory, Air Force Eastern Test Range, Manned Space Flight Network, and the NASA Communications Network of Goddard Space Flight Center. This volume covers the Tracking and Data System activities in support of the Mariner Mars 1971 Project for orbital operations, which includes the period from orbit insertion to end of primary mission. Tracking and Data System flight support, performance evaluation, and configuration are described.

ACKNOWLEDGMENT

The authors acknowledge the considerable assistance of the NASA Communications Network of the Goddard Space Flight Center and the Deep Space Network (DSN) of the Jet Propulsion Laboratory in providing tracking and data support. Information regarding the DSN is based on material generated by the DSN Interface Team for the Mariner Mars 1971 Project, the DSN Operations Staff, and the monthly DSN Operations Reports. The following persons made significant contributions:

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ABSTRACT

This volume of the Tracking and Data System (TDS) Support for the Mariner Mars 1971 Mission final report contains the deep space tracking and data acquisition activities in support of orbital operations, which include the period from orbit insertion (November 14, 1971) to end of primary mission (April 1, 1972). During this period (February 12, 1972), a major NASA objective was accomplished: completion of the 180th revolution and 90th day of data gathering with the spacecraft about the planet Mars. Included are presentations of the TDS flight support pass chronology data for each of the Deep Space Stations used, and performance evaluation for the Deep Space Network Telemetry, Tracking, Command, and Monitor Systems. With the loss of Mariner 8 at launch, Mariner 9 assumed the mission plan of Mariner 8, which included the TV mapping cycles and a 12-hr orbital period. The mission plan was modified as a result of a severe dust storm on the surface of Mars, which delayed the start of the TV mapping cycles until January 3, 1972. Thus, the end of primary mission date was extended to April 1, 1972 to complete the TV mapping cycles.

I. INTRODUCTION

A. Purpose

This document, Volume III of the Tracking and Data System (TDS) Support for the Mariner Mars 1971 (MM'71) Mission, summarizes deep space tracking and data acquisition activities in support of orbital operations of the Mariner Mars 1971 Mission from orbit insertion (November 14, 1971) to end of primary mission (April 1, 1972). With the previously completed Volumes I and II, together with Volume IV, this report constitutes the complete history of TDS activities supporting MM'71.

B. Scope

Volume III contains a description of TDS flight support of orbital operations from orbit insertion to end of primary mission (Section III). TDS requirements (Section I), TDS plan and configuration (Section II), and TDS performance and evaluation (Section III) are also included.

Volume I covers TDS support of prelaunch testing and training for both near-Earth and deep space phases (Section IV) and TDS flight support from launch operations through first trajectory correction maneuver (Section V). TDS requirements (Section II), TDS plan and configuration (Section III), and performance evaluation (Section V) are also included.

Volume II describes TDS flight support from the first trajectory correction maneuver through the end of the cruise period and orbit insertion (Section III), plus TDS support of preorbital testing and training (Section IV). TDS requirements (Section I), TDS plan and configuration (Section II), and TDS performance and evaluation (Section III) are also included.

Volume IV will describe the MM'71 Extended Mission TDS support.

C. TDA Function and Organization

The TDA function and organization is presented in the Introduction, Section I, Volume I, and is therefore not covered in this report.

D. TDS Organization

The TDS organization, as described in Volume I, has undergone no changes or additions.

E. TDS Requirements on Project

The DSN required the Project to supply spacecraft/DSS telecommunications interface information in accordance with JPL Document 610-74, Volume II of Operations Plan. The Project was required to supply standards and limits for the DSN Tracking, Telemetry, and Command Systems in accordance with JPL Document 610-75, Revision A, Volume IIB of Operations Plan. The TDS required the Project to conform with NASA Directive 2570.1A, which required all planetary projects to provide their spacecraft with a capability to turn off the RF carrier by command at the completion of the mission.

F. Mission Operations

Mission Operations for MM'71 are presented in Section I of Volume I.

G. Mission Plan

1. General. The MM'71 Mission Plan is the same as that presented in Volume II, except for the modification of Mission Orbit Operations with the Mariner 9 spacecraft as a result of a severe dust storm on the surface of Mars. This dust storm covered most of the surface features of Mars and did not subside sufficiently to start the TV mapping cycles until January 3, 1972. Three complete mapping cycles (TV plus other science)

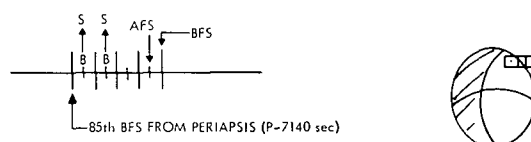
- (5) One CC&S load might run several days without updates.
- (6) The only variable pointing shall be the starting position of:
 - (a) Three IRR terminator scans (2 positions)
 - (b) Tetrad 1
 - (c) Tetrad 2
 - (d) Global TV
 - (e) Limb TV
 - (f) Polar or VSF TV
 - (g) UVS low-rate target
 - (h) UVS high-rate target
 - (i) UVS limb scan
 - (j) IRR limb scan
 - (k) Mapping

- (1) Standard Mission Orbit Operations (Volume II), orbits 0-23, 11/14/71 to 11/26/71.
- (2) Recon I Cycle Plan, orbits 24-63, 11/26/71 to 12/16/71.
- (3) Recon II Cycle Plan, orbits 64-99, 12/16/71 to 1/3/72.
- (4) Cycle I Mapping, orbits 100-138, 1/3/72 to 1/22/72.
- (5) Cycle II Mapping, orbits 139-177, 1/22/72 to 2/10/72.
- (6) Cycle III Mapping, orbits 178-216, 2/10/72 to 3/1/72.
- (7) Bi-Cycle Plan, orbits 217-278, 3/1/72 to 4/2/72.
- (8) Extended Mission Plan, 2/12/72 to 12/1/72.

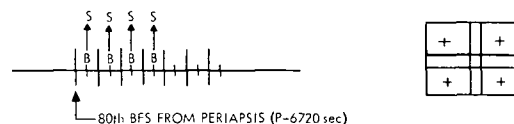
Recon I mission profile is shown in Fig. 1.

The plan for zenith revolutions follows:

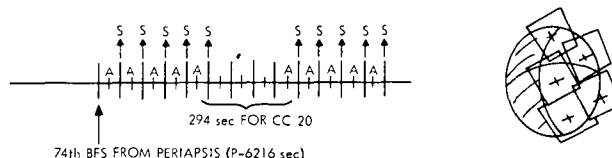
- (1) Slewed from reference position (KA 193.0, CA 96.2) to KA&CA of limb TV. Slew begins at 185 min before periaapsis (11, 100 sec).
- (2) Limb TV - Two B frames, overlapping, on limb:



(3) Tetrad 1 - Overlapping of four B frames on a target (using a standard slew pattern):



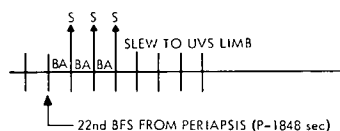
(4) Global TV - Mosaic the lighted disk with five A frames in two colors:



The Recon I Mission Plan was outlined as follows:

- (1) Assumes a 30-picture budget.
- (2) The sequences do not change as far as timing is concerned and very little as far as pointing is concerned, except for the targeted B's (tetrads) and limb TV.
- (3) The capability will exist to shutter single B frames at almost any time by direct commands (DCs). Slews for such extra frames (for satellites) shall be QCs. All such frames shall come out of the mapping budgets. Mapping will automatically terminate at end of tape.
- (4) The first revolutions that this plan could be implemented in are revolutions 24 and 25.

- (5) Tetrad 2 - Same as Tetrad 1, begins on the fifty-seventh BFS from periapsis (P-4788 sec).
- (6) UVS and IRIS pressure mapping as normal.
- (7) Slew to polar TV or VSF position at the twenty-seventh BFS from periapsis (P-2268 sec).
- (8) Polar TV or VSF photography - Take three BA pairs in a standard pattern for both polar and VSF:

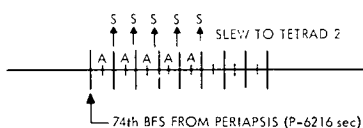


- (9) UVS limb experiment as normal.
- (10) Begin slew to mapping position at the thirteenth BFS from periapsis (P-1092 sec).
- (11) Map - Take two BA pairs or map to end of tape recorder beginning at the tenth BFS from periapsis (P-840 sec). Mapping is done at a fixed CA&KA.
- (12) Begin slew to UVS high-rate target at $P_Z + 12$ min (Lyman- α 1).
- (13) Begin slew to UVS low-rate target at $P_Z + 275$ min (Lyman- α 2).

J. Nominal Plan for Nadir Revolutions

The plan for nadir revolutions follows:

- (1) Slew from Lyman- α 2 (low-rate) to CA&KA of first IRR terminator swath. Slew begins at 61 min from apoapsis.
- (2) Slew to second IRR terminator swath.
- (3) Slew to third IRR terminator swath.
- (4) Limb TV - Same as zenith pass, same timing.
- (5) Tetrad 1 - Same as zenith pass, same timing.
- (6) Global TV - Mosaic lighted disk with five A frames in only one color.



- (7) Tetrad 2 - Same as on zenith pass, begins on sixty-sixth BFS from periapsis (P-5544 sec).
- (8) Slew to begin IRR limb scan at end of tetrad.

- (9) Begin slew to polar or VSF TV position at the twenty-seventh BFS from periapsis (P-2268 sec).
- (10) Polar TV or VSF TV - Same as zenith revolution, same time. When completed begin slew to mapping position. Standard pattern for both polar and VSF TV.
- (11) Map - Take at least four BA pairs + 1 B. Begin same time as on zenith pass.
- (12) Begin slew to reference position (CA 96.2, KA 193.0) at $P_N + 12$ min.

K. Reconnaissance II Mission Plan Guidelines

Recon II Mission Plan follows:

- (1) Assumes 32-picture per revolution tape recorder budget.
- (2) The basic timing and structure of individual links and overall sequences will remain constant from revolution to revolution.
- (3) Optimization of the pointing of certain links will be accomplished periodically. Links that will be considered for such optimization are:
 - (a) Global TV (N and Z)
 - (b) UVS limb scans (Z)
 - (c) UVS/IRR/IRIS morning spectral mapping (Z)
 - (d) IRR morning terminator scans (N)
 - (e) UVS/IRR/IRIS evening spectral mapping (N and Z)
 - (f) TV mapping (N and Z)
- (4) Links that may be considered retargetable on a daily basis are:
 - (a) Tetrads 1 and 2 (Z)
 - (b) Triads 1 and 2 (N)
 - (c) Dyad (N)
 - (d) Sextad (N and Z)
 - (e) Lyman- α 1 (high-rate)
 - (f) Lyman- α 2 (low-rate)
- (5) Satellite astronomy will be carried out by use of existing targetable links, where possible, without changing the timing and structure of the link, or by ground commanding the shuttering of single B frames or single BA pairs. All slews for such satellite photography will be CC&S-controlled. Satellite frames will automatically reduce the mapping budget by an amount equal to the number of satellite frames in a revolution.
- (6) One CC&S load might run several days without an update.
- (7) Planning for a two-revolution sequence will be completed seven days before the

execution of the sequence by the spacecraft; however, changes will be considered up to three days before execution.

- (8) The first revolutions that this plan could be implemented in are revolutions 64 and 65.

Recon II mission profile is shown in Fig. 2.

L. Cycle I Mission Plan Guidelines

Cycle I Mission Plan follows:

- (1) Assumes 32-picture per revolution tape recorder budget.
- (2) The basic timing and structure of individual links and overall sequences will remain constant from revolution to revolution.
- (3) Optimization of the pointing of certain links will be accomplished periodically. Links that will be considered for such optimization are:
 - (a) Global TV (N and Z)
 - (b) UVS limb scans (Z)
 - (c) UVS/IRR/IRIS morning spectral mapping (Z)
 - (d) IRR morning terminator scans (N)
 - (e) UVS/IRR/IRIS evening spectral mapping (N and Z)
 - (f) TV mapping (N and Z)
- (4) Links that may be considered retargetable on a daily basis are:
 - (a) Pentad (Z)
 - (b) Tetrads (N and Z)
 - (c) Dyads (N)
 - (d) UVS targets
 - (e) TLR
- (5) Satellite astronomy will be carried out by use of existing targetable links, where possible, without changing the timing and structure of the link, or by ground commanding the shuttering of single B frames or single BA pairs. All slews for such satellite photography will be CC&S-controlled. Satellite frames will automatically reduce the northern hemisphere reconnaissance budget by an amount equal to the number of satellite frames in a revolution.
- (6) Planning for a two-revolution sequence will be completed seven days before the execution of the sequence by the spacecraft; however, changes will be considered up to three days before execution.

- (7) The first revolutions that this plan could be implemented in are revolutions 100 and 101.

Cycle I mission profile is shown in Fig. 3.

M. Cycle II Mission Plan Guidelines

Cycle II Mission Plan follows:

- (1) Assumes 32-picture per revolution tape recorder budget with 8-kbps playback to supplement 16-kbps playback of both revolutions. Playback ends at P-60 min.
- (2) The basic timing and structure of individual links and overall sequences will remain constant from revolution to revolution (at least until revolution 142), except for slews identified as floating slews in the detailed orbital sequence plan.
- (3) Optimization of the pointing of certain links will be accomplished periodically. Links that will be considered for such optimization are:
 - (a) UVS limb scans (Z)
 - (b) UVS/IRR/IRIS morning spectral mapping (Z)
 - (c) IRR morning terminator scans (N)
 - (d) UVS/IRR/IRIS evening spectral mapping (N and Z)
 - (e) TV mapping (N and Z)
 - (f) Geodesy (N and Z)
- (4) Links that may be considered retargetable on a daily basis are:
 - (a) Single B frames (SB)
 - (b) Triads (N and Z)
 - (c) UVS targets
- (5) Satellite astronomy will be carried out by use of existing targetable links, where possible, without changing the timing and structure of the link, or by ground commanding the shuttering of single B frames or single BA pairs. All slews for such satellite photography will be CC&S-controlled. Satellite frames will automatically reduce the northern hemisphere reconnaissance budget by an amount equal to the number of satellite frames in a revolution.
- (6) Targeting for SB 1 will periodically be chosen to optimize a UVS limb scan on zenith revolutions.
- (7) Targeting for SB 2 and 3 will be chosen in conjunction with UVPM scans on the zenith revolution and IRR scans on the nadir passes.

- (8) Early tape recorder start capability will be exercised on the nadir pass after the Map 2 sequence.
- (9) Late slew (B-frame shutter + 48 sec) capability will be exercised only on SB 1 on nadir and zenith passes.
- (10) Planning for a two-revolution sequence will be completed seven days before the execution of the sequence by the spacecraft; however, changes will be considered up to three days before execution.
- (11) The first revolutions that this plan could be implemented in are revolutions 139 and 140. Since the mapping cycle is only 39 revolutions long, the last revolution of Cycle II will be 177.

Cycle II mission profile is shown in Fig. 4.

N. Cycle III Mission Plan Guidelines

- (1) This plan assumes a variable picture budget due to the lowering telecommunications margins that occur throughout this cycle. The cycle begins with over 30 pictures per revolution and ends with about 13 or 14 pictures played back per revolution. Two methods to account for the diminishing picture return were assumed. This plan first allowed for one major CC&S update to occur sometime during the cycle to remove selected frames. Secondly, it was assumed that adjustment of the time of playback and position of the recorder for the start of playback could be accomplished on a daily basis to bias which pictures are to be played back. This plan also assumes that playbacks end at the time the planet comes into view.
- (2) The basic timing and structure of the individual links and overall sequences will remain constant from revolution to revolution before and after the one major CC&S update.
- (3) Optimization of the pointing of the TV mapping link will be accomplished periodically.
- (4) Links that may be considered retargetable on a daily basis are:
 - (a) Tetrads and dyads (N and Z)
 - (b) T.E.C. (Z)
 - (c) UVS limb scans (Z)
 - (d) UVS/IRR/IRIS spectral scans (N and Z)

(e) UVS Lyman- α targets

- (5) Satellite astronomy or other target photography will be carried out by use of existing targetable links, where possible, without changing the timing and structure of the link, or by ground commanding the shuttering of single B frames or single BA pairs. All slews for such satellite and additional target photography will be CC&S-controlled. These frames will automatically reduce the northern hemisphere reconnaissance budget by an amount equal to the number of such frames in a revolution.
- (6) Early tape recorder start capability for A frames will exist for the entire nadir and zenith revolution sequences; however, this capability will be exercised at the beginning of the cycle only on the nadir pass.
- (7) While this plan does not specifically include a floating dyad, this link is desirable for the last part of Cycle III. A floating dyad, two B frames on a single target, would replace Dyad 1 and Tetrad 1 on the zenith pass and Dyad 1 and Dyad 2 on the nadir pass. It is assumed that this floating dyad would be fixed in either one of two possible times on a daily basis.
- (8) Planning for a two-revolution sequence will be completed seven days before the execution of the sequence by the spacecraft; however, changes will be considered up to three days before execution.
- (9) The first revolutions that this plan could be implemented in are revolutions 178 and 179. Since the mapping cycle is only 39 revolutions long, the last revolution of Cycle III will be 216.

Cycle III playback profile is shown in Fig. 5. Cycle IIIa profile (beginning) is shown in Fig. 6.

O. Bi-Cycle Mission Plan Guidelines

The Bi-Cycle Mission Plan extended from the end of the TV Mapping Cycle III (March 11, 1972) to the beginning of Sun occultation (April 2, 1972). For the first 15 days, to March 15, 1972, spacecraft power usage tests were conducted to determine maneuver characteristics. No HGA maneuvers were performed during this period, but TV mapping was conducted on a noninterference basis. An 8-day window was then available to March 23, 1973, when HGA pointing maneuvers were allowed: TV mapping was conducted during this period. The remaining 10 days before April 2, were used only for SCT testing in preparation for the solar occultations.

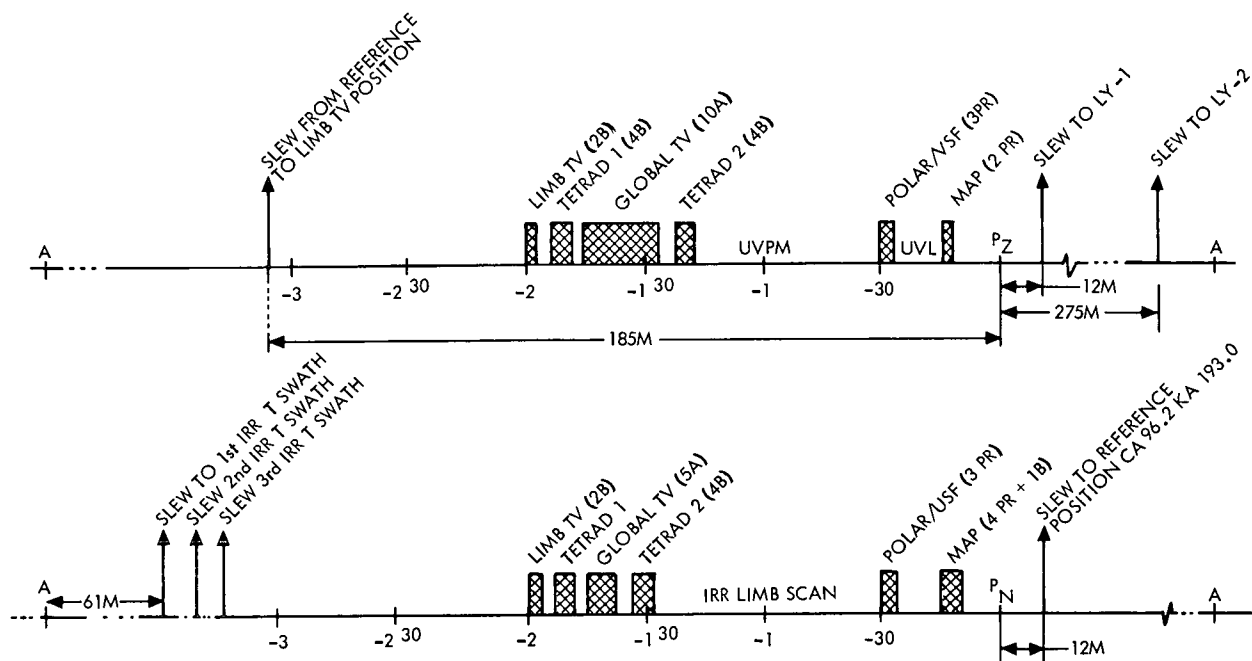


Fig. 1. Recon I mission profile

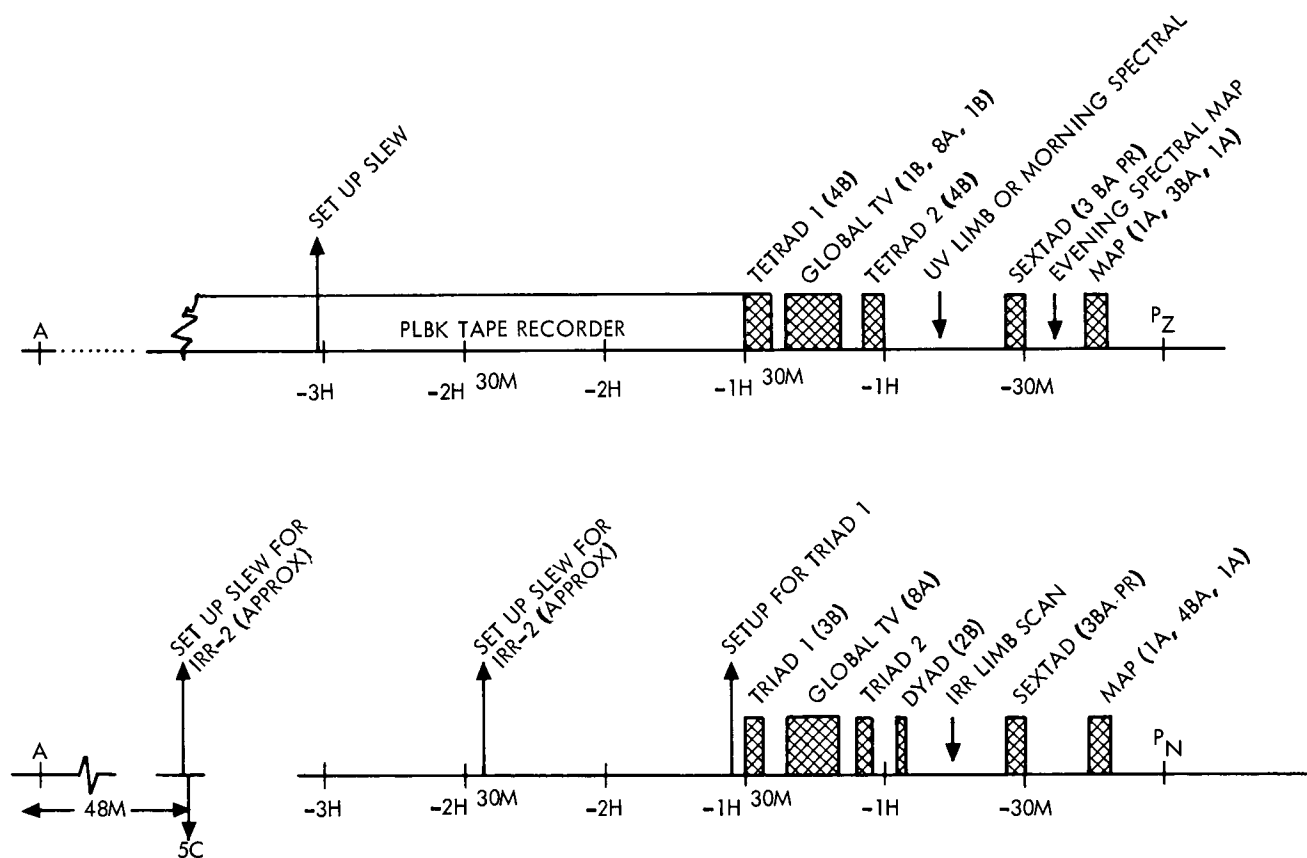


Fig. 2. Recon II mission profile

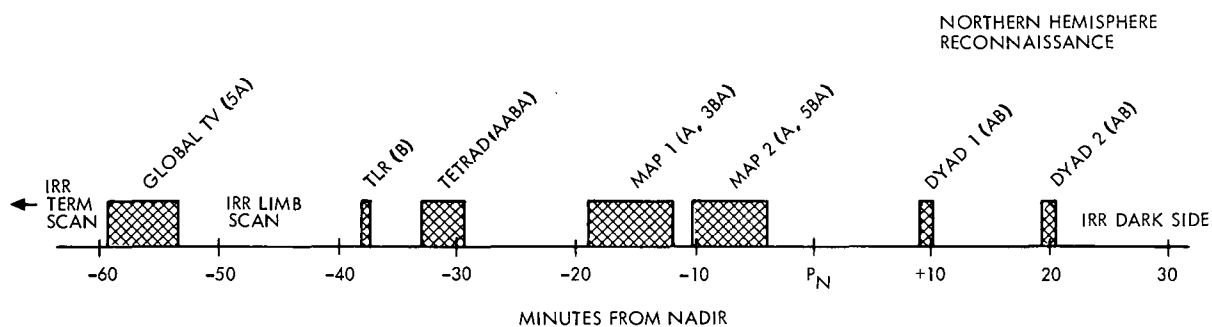
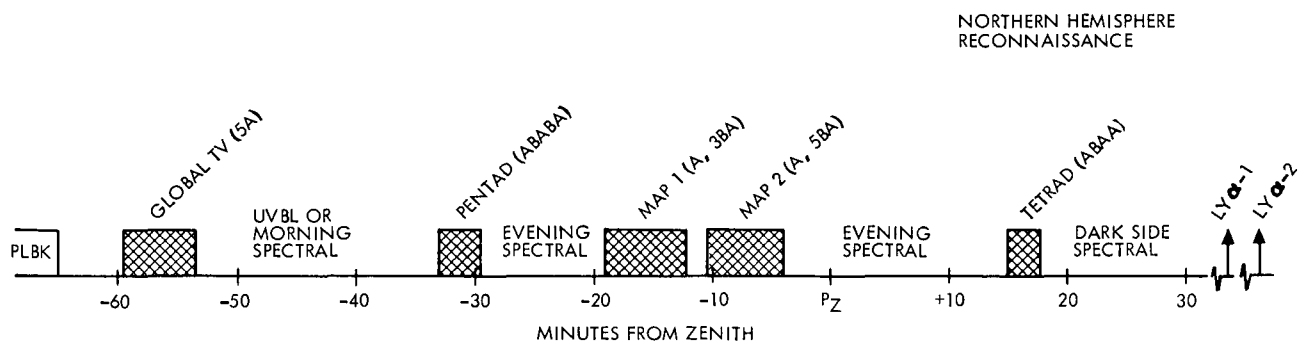


Fig. 3. Cycle I mission profile

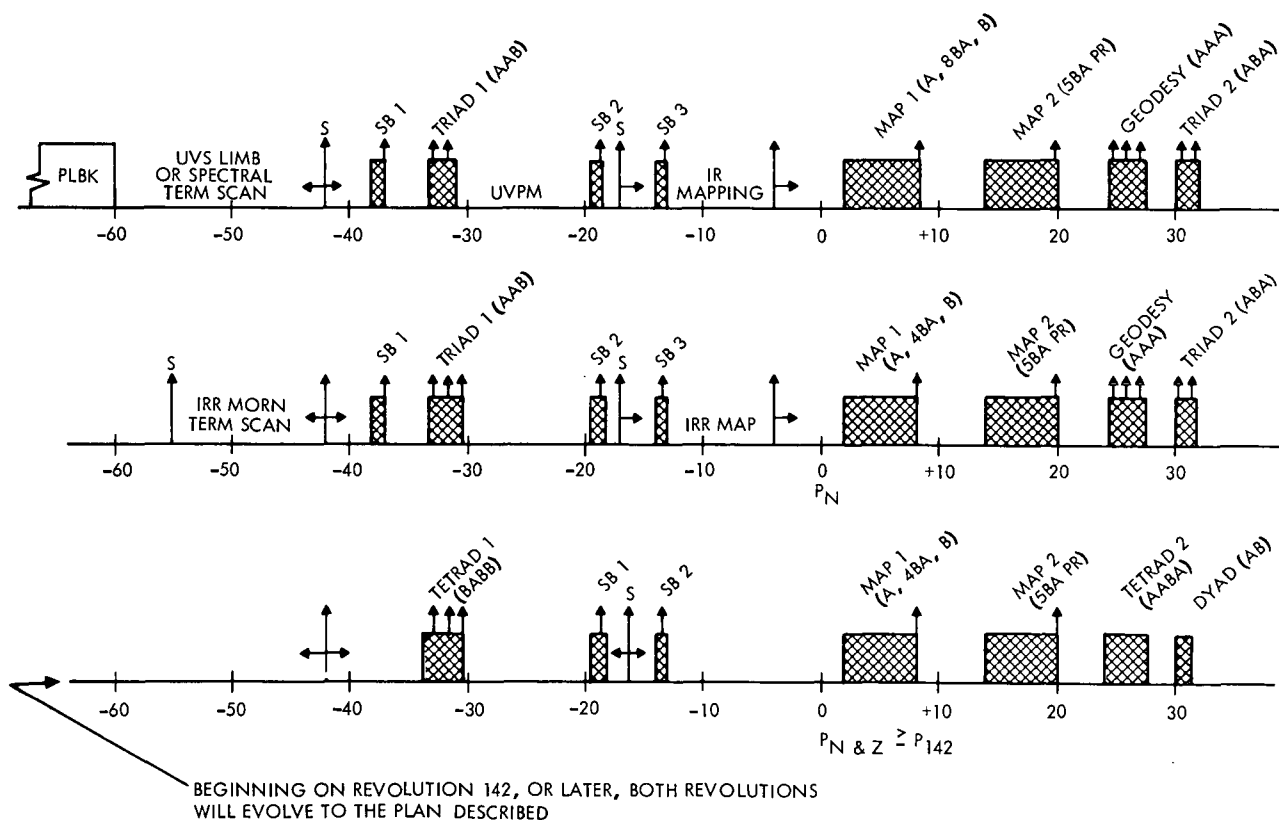


Fig. 4. Cycle II mission profile

PICTURES (PIXS)

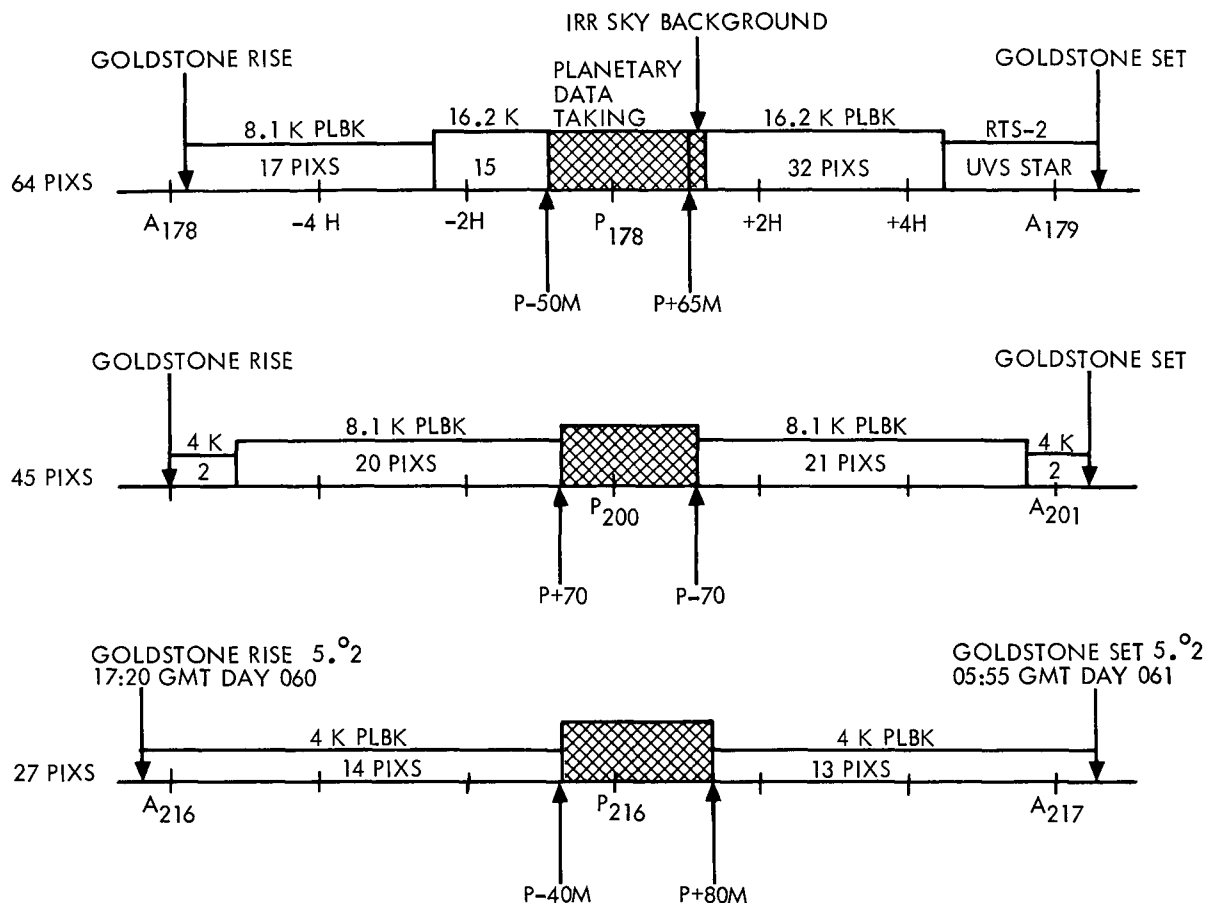


Fig. 5. Cycle III playback profile

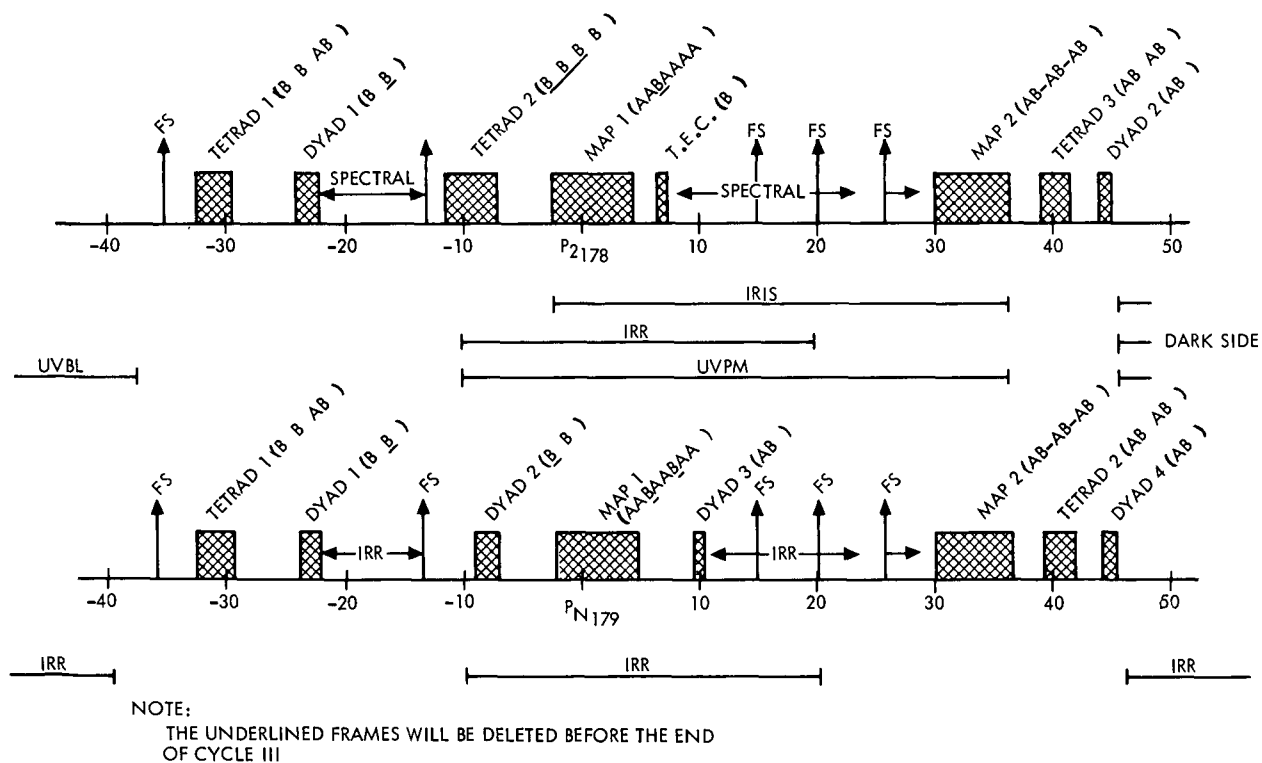


Fig. 6. Cycle IIIa profile (beginning)

II. TRACKING AND DATA SYSTEM PLAN AND CONFIGURATION

The Tracking and Data System plan and configuration remained the same as that presented in Volume II of the Tracking and Data System Support for the Mariner Mars 1971 Mission (Section III).

III. TRACKING AND DATA SYSTEM FLIGHT SUPPORT

A. General

Tracking and Data System flight support for Mariner 9 Spacecraft Orbital Operations extended from orbit insertion (November 14, 1971) through the end of the Bi-Cycle Mission Orbit Operations (April 1, 1972). (See Section I, Subsection G, for the Standard Mission Orbit Operations cycle plans, number of orbits, and respective dates.) The Reconnaissance, Mapping, and Bi-Cycle Plans were formulated and placed into operation on January 3, 1972 as a result of the severe dust storm on the surface of Mars, encountered at the time of orbit insertion.

Details of the TDS flight support were obtained from monthly DSN Operations Reports for MM'71. The mission-dependent DSN Operations Organization is described in Volume I. Functional flight support pass chronology data for the DSN are presented in Subsection B. DSN Telemetry, Tracking, and Command Systems analysis and performance evaluations are presented in Subsections C, D, and E.

All times and dates herein are expressed in Greenwich Mean Time (GMT or Z).

B. Flight Support Pass Chronology

1. General. Tracking and Data System flight support included in this volume for Mariner 9 spacecraft orbital operations extended from the end of orbit insertion, 0101Z on November 14, 1971, day 318, through the end of the Bi-Cycle Mission Orbit Operations Plan, orbit 278, April 1, 1972, day 92. For a more complete description of the MM'71 Mission Plan, see Project Document PD 610-16, NP-71-4-22A.

2. Pass chronology data. A total of 139 passes (492 total tracks) were supported during the 4 months and 17 days of this period, during which 32,567 commands were transmitted to the spacecraft.

General performance of all DSN systems supporting the MM'71 Mission was excellent. DSN pass chronology activity is summarized in Table 1. Details of pass chronology are presented in the appendix. Only anomalies affecting the prime data source (the station whose telemetry HSD was being processed by the Central Processing System (CPS) or, if the CPS was not supporting, the station that was two-way during track overlaps) are given in the pass chronology on a pass-by-pass or track-by-track basis. Each anomaly is prefaced by a

facility or system identifier, such as DSS, GCF, or CPS. Anomalies are listed by item number and time of failure and are limited to items that significantly affected mission operations during scheduled DSN flight support (interruptions of real-time data flow or actual data loss to the Project for 5 min or longer).

Configuration deviations that restricted the Project from conducting normal or planned operations commensurate with scheduled DSN support were considered significant and will be found in the pass chronology. Comments listed under deviations or anomalies in the pass chronology were based on real-time observations and indications and did not necessarily reflect nonreal-time followup on items requiring further investigation.

All data outages were considered as real time and recoverable, and data outage times were considered the same as system or equipment down times, unless otherwise indicated.

C. DSN Telemetry System Analysis and Performance

Residual data plots for November 1971, shown in Volume II of the TDS Support for the Mariner 1971 Mission, include the MOI for all stations. Residual data plots of SNR levels, uplink (UL) signal levels, and downlink (DL) signal levels for each station tracking Mariner 9 spacecraft during this reporting period are shown in Figs. 7 through 27. Values plotted were taken at meridian crossing for each pass. The set of plots represents those stations that have actively participated in tracking the Mariner 9 spacecraft during this reporting period. The number of days plotted varies from station to station as a function of individual station tracking schedule. A statistical analysis on absolute data values yielded results detailed in Table 2.

D. DSN Tracking System Analysis and Performance

1. Interface with experimenters

a. Data provided for celestial mechanics experiment. The Tracking System Analysis Group provided data for the celestial mechanics experiment (CME) in the form of a CME tape written in conjunction with the master data records (MDR).

b. Data provided for occultation experiment. The Tracking System Analysis Group.

provided the following data for the occultation experiment:

- (1) A copy of the engineering predicts covering each occultation and a copy of synlo predicts for each station with an open loop receiver.
- (2) Pseudoresiduals for each station participating in the occultation events.
- (3) A project tracking tape (PTT) for each occultation event. Data coverage for each tape was from 10 min prior to enter occultation to approximately 15 min after exit occultation. Tables 3 through 6 show the occultation view period for each station participating.
- (4) Each PTT provided was supplemented with a 1443 printout showing transmitter frequency, data editing, pass summary data, and the first and last physical data record on the tape.

Table 7 shows the tapes provided for the occultation experimenter and the recycle schedule used in providing the tapes.

2. Orbital trim maneuver doppler shift. The orbital trim maneuver necessary to put Mariner 9 into a 12-hr orbit was planned for a ground observed time of 02:43:44 GMT, November 16, 1971. The burn was programmed to last 6.25 sec and to result in a total doppler shift (one-way) of -117.65 Hz. The tracking data were processed by the pseudoresidual program in near real time, and the resulting doppler residuals were hand-plotted as seen in Fig. 28. The doppler residual as produced by the pseudoresidual program appeared to be within 1 Hz of the predicted value.

At the conclusion of the first set of occultations, it was decided to effect a second orbital trim maneuver to increase the period and the periastron altitude. This maneuver was planned for a ground observed time of 21:58:52, December 30, 1972. The burn was programmed to last 17.2 sec and result in a total two-way doppler shift of -596 Hz.

Navigation provided the Tracking System Analysis Group with two probe ephemeris tapes (PETs), one tape without the burn trajectory, and one tape with the burn trajectory included. Predicts were generated using the no-burn probe ephemeris tape. Residuals were computed using the actual observed data minus the no-burn prediction data, thus illustrating the actual burn as it occurred. The doppler residuals as produced by the pseudoresidual program were -595 Hz, or within 1 Hz of the predicted value. Figure 29 shows the orbital trim maneuver burn as it appeared in the data. This display was made available on the predicts status display CCTV. It was another example of the inherent capability of the Tracking System Analysis Group to monitor and display spacecraft events as they appear in the data.

In summary, TDH data were basically good throughout this reporting period. Data losses were caused primarily by disk problems within the 360/75 computer system. The Tracking System Analysis Group was able to provide recovery of 98.5% of data losses by requesting retransmission

of data from the CP or DSS when necessary. With the exception of the disk problems, no major difficulties were experienced in performing DSN tracking analysis activities.

3. TDH data received and processed

a. TDH system. The tracking system gathered and recorded tracking data and transmitted it to the SFOF for use in support of the spacecraft navigation function. As these data were received in the SFOF, it was the responsibility of the Tracking System Analysis Group to validate, edit, store, and process these tracking data so that they may be passed on to the Navigation Group and other users of the DSN.

b. Prime DSS coverage. DSSs 12, 41, 62, and 14 remained the prime DSN stations for the Mariner mission during this reporting period. Due to 360/75 computer software problems, the radio metric data accountability was not 100% reliable for this reporting period.

c. TDH subsystem problem at DSS 12. On December 2, 1971 (day 336), starting at 01:10:00, the TDH subsystem began losing a digit in the day of year (DOY) field, and the problem was not corrected until 03:05:00. Because of this error in the data, it was impossible to process the data taken during this period in the 360/75.

d. Summary of tracking data. Radio metric data received and processed during this period were generally of good quality with very few outages. The basic tracking plan used during this reporting period was two-way doppler tracking with two-way transfers between the prime DSN stations. One-second sample rate requirements by the occultation experimenter account for the large amount of tracking data.

4. Predicts

a. Orbital predicts. Predicts were generated to meet occultation experiment requirements and to obtain good two-way spacecraft acquisition data. The track synthesizer frequency (TSF) and the two-way acquisition logic were determined in near real time by the Tracking System Analysis Group. The TSF and the sequence of events to obtain two-way acquisition were displayed on the predict status CCTV display. Figure 30 is an example of the predicts message displayed. This message contained the TSF to be used for both enter and exit occultation, the transmitter on time, transmitter on frequency, the tuning rate, and tuning span.

b. Significant predict analysis. On day 354 the Navigation Team provided data which indicated that the last occultation would occur on day 357 for the Goldstone Zenith Station. The Tracking System Analysis Group analyzed the data and concluded that one additional occultation had been overlooked by the Navigation Team. After consultation with the Navigation Team concerning this possibility, it was concluded that under the current double-precision trajectory configuration, it was possible to miss small occultations. A new double-precision trajectory run was executed with a smaller event search interval and the existence of one more occultation was proven. This is an example of the valuable technical interfaces that

existed between the various elements of the DSN and the Project.

c. Accuracy of predicts during orbital phase. During orbital phase, the uncertainties in the spacecraft trajectory are far greater than during the cruise phase. The resulting inaccuracies in predicts at times get large enough to be considered bothersome. A simple measure of the predicts error is the value of the doppler residual produced by the pseudoresidual program, since this is merely the raw doppler data minus the predicted doppler data. Two-way doppler residuals were recorded from pseudoresidual output at enter occultation minus 2 hr, the local maximum (peak) near periapsis, enter occultation, exit occultation, and exit occultation plus 2 hr and can be seen in Table 8. The horizontal lines indicate a new PET. As can be seen, the worst PET was the one in use from day 331 to 334, when the maximum doppler residual exceeded 400 Hz and the maximum error in predicted occultation time exceeded 20 sec.

d. Special predicts. Two sets of special predicts were generated for the second orbital trim maneuver: one set using a PET without the burn trajectory, and one set using a PET with the burn trajectory.

e. Summary of predicts. Predicts for this reporting period were very good. Adjustments and biases were made in real time to account for spacecraft events having an effect on frequencies used by the DSN. A total of 98 sets of predicts were generated. Sixty-seven sets were transmitted to the DSSs while the remaining sets were used for special events and for predicts studies.

5. Occultations. The DSN Tracking System Analysis Group provided two areas of support to the occultation experiment: predicts for the open- and closed-loop receiver, and gathering of the closed-loop data in a form usable by the experimenter.

The closed-loop predicts are the standard tracking predicts with track synthesizer frequencies manually set to optimize acquisition at exit occultation, and to restrict tuning to handovers and exit occultation to minimize data loss. The open-loop predicts are special predicts called synlo.

The tracking data processing provided by the Tracking System Analysis Group consisted of processing one-second TDH data encompassing occultation, using the DSN tracking software subsystem in the 360/75. The processing is no different than that which is provided for the Navigation Team, the final output being a project tracking tape (PTT), except for problems peculiar to handling one-second sample rate TDH. Special procedures which enable the tracking software subsystem to successfully process two streams of one-second TDH at TTY rate (one point per 6 sec) had to be developed in near real time.

The occultation experimenter was unable to process PTTs for the first week of orbital operations because of problems with the occultation software. This resulted in a backlog of over 14 PTTs (two a day, one for Goldstone and one for nadir occultations). This would have been of no consequence except that there were problems with eight of the initial tapes which went undiscovered

until after the tracking data had been cleared off the real-time disk. The problems were of a nature that did not affect navigation but only the one-way exit occultation data. The late discovery of the bad tapes meant that the Tracking System Analysis Group had to find time to take the tracking software subsystem offline to recreate the unusable tapes, a process that required one hour per tape. These recreated occultation PTTs were successfully provided.

An additional data type was planned for the occultation in the form of 10 per second DTS data provided by DSS 14. Unfortunately, the SFOF portion of the system was not operational. The data were, however, recorded on-site, and a plan was formulated to process these data in December using an offline 360/75.

The occultation record as of November 30, 1971 was:

Number of occultations:	34
Number of successful entries:	34
Number of successful exits:	34
Rapid two-way reacquisition at exit:	29

In each instance of a single station missing entry or exit open-loop data (two DSS 41 entries, one DSS 62 exit), a second station did take good data. The two DSS 41 entries missed on open loop were caused by an error in synlo predicts, and the exit open loop missed at DSS 62 resulted from the station misinterpreting the synlo predict output.

There were five cases where the first attempt at two-way acquisition at exit occultation was unsuccessful. The first case was caused by DSS 62 being off point. The remaining four cases were a combination of frequency errors and a spacecraft receiver anomaly. The reacquisition at exit depended upon dropping the spacecraft at its rest position at enter occultation and reacquiring at exit by tuning about this rest frequency. The problem was that after about $2\frac{1}{2}$ days in orbit the spacecraft receiver's rest position shifted by 96 Hz at VCO level for no known reason. Once this anomalous shift was detected and its symptoms understood, tuning procedures were modified accordingly and all subsequent acquisitions at exit were successful.

6. Tracking system data analysis. The Tracking System Analysis Group operated a real-time DSN 360/75 pseudoresidual program that monitored tracking prediction quality as well as tracking data quality. To monitor significant events, hand plots were prepared and displayed on the predict status CCTV.

Pseudoresiduals were computed for each station pass and displayed on CCTV and on teletype at the end of each pass. The average value of the residuals for each pass was computed and plotted. Figures 31 through 48 illustrate the average two-way doppler residual and doppler noise per pass for each of the prime stations. Average residual plots over each station were computed from day 318, pass 168 (OI) through day 092, pass 307, April 1, 1972.

E. DSN Command System Analysis and Performance

1. Command activity. Command activity in support of the orbit of Mariner 9 was significantly

increased during this report period. Occasionally, delays were caused by erroneous data displays or loss of data.

In summary, the Command System performed extremely well since the update of the TCP software, which led to a great increase in operational confidence. To date, a cumulative total of 37,232 commands has been transmitted to the spacecraft. Table 9 shows the total number of commands transmitted by each DSS as of March 31, 1972. A four-month summary of command activity is shown in Table 10. The command activity summary for November 1971 is given in Volume II of the TDS Support for the MM'71 Mission.

2. System performance. The DSN Command System performed well with only three aborts during December 1971. Of these, two were caused by equipment failure and one by a procedural error. During January 1972, no aborts occurred; during February, five occurred; and none occurred in March.

Other problems were experienced which caused delays in the use of the Command System by the Project. These problems had no significant effect on the mission, but did cause periodic delays. Causes of these problems were:

- (1) 360/75 outages.
- (2) TCP I/O buffer failures.
- (3) SFOF data set failures.
- (4) HSDL outages.
- (5) TCP software anomalies.
- (6) Procedural errors.
- (7) Equipment failures.

3. System upgrade. On January 17, 1972, the 360/75 orbit support software, Model 5, was upgraded for flight support. However, it was removed from flight support after problems were noted in the Command System. The software was revised from version 24.0 to version 27.2 and again placed on flight support on January 30, 1972. However, two problems remained to be fixed:

- (1) Display of confirmation messages on DTV or TTY delayed during certain 360/75 high activity periods.
- (2) Project and NAT Command intermittently locked out of CPS during the editing process of the tracking disk file.

These two problems were corrected as soon as the required changes were approved by the Configuration Control Board and incorporated into the 360/75.

Model 5 of the 360/75 orbit support software was then revised from version 27.2 to version 27.4, and the problems were resolved.

4. Command MDR. Relatively few problems were encountered in the generation of Command MDRs after the introduction of the Model 5 software version 27.4 into the 360/75. The recovery of the command data lost before Model 5 upgrade was accomplished by having DSSs 12, 41, and 62 replay the required original data records (ODRs) during February and March 1972. Command data recovered consisted of:

- (1) 12 passes from DSS 12.
- (2) 13 passes from DSS 41.
- (3) 9 passes from DSS 62.
- (4) 2 passes from DSS 14.

The Command MDR file for Mariner 9 was then complete and up to date.

Table 1. DSN flight support/orbital operations: Mariner 9 pass chronology from orbit insertion (Nov. 14, 1971) through bi-cycle plan operations (Apr. 1, 1972)

Month	Period	DSS	Coverage (tracks)	Ranging		S/C cmds xmt'd	Remarks
	Days - Passes			μ	τ		
Nov 1971	14 Nov 1971 to	12	14	9		583	Negative displacement of SNR residuals at DSS 41 and 51, plus gradual negative divergence of the residuals at all stations, noted. Tracking predicts generally good. Special predicts support for orbital operations. MDR records on tapes generated with each SDR disc selection. Command System performance excellent.
	1 Dec 1971	14	14			23	
	Pass 168 to	41	14			542	
	Pass 185, or	42	3			-	
	17 Passes	51	2			-	
	Days 318-335	62	12			1,596	
		Nov 1971 Total	59	9		2,744	
Dec 1971	1 Dec 1971 to	12	28	22		577	Mostly occultation phase orbital predicts; 25 sets total, including 2 sets for Trim 2 maneuver, all very good. Some minor 360/75 software problems, slightly reducing the quality of the tracking data. 13 MDRs generated with each SDR deletion. Command System performance good; only 3 aborts.
	1 Jan 1972	14	29	1	1	17	
	Pass 185 to	41	29			425	
	Pass 216, or	42	3			-	
	31 Passes	51	4			-	
	Days 335-001	62	27			6,827	
		Dec 1971 Total	120	23	1	7,846	
Jan 1972	1 Jan 1972 to	12	32	8		679	Telemetry System performance excellent; few outages. Radio metric data received and processed generally of good quality. Command System available 97 percent of time; no aborts. On 17 Jan 1972, 360/75 software Mod 5 upgraded for flight support; placed in service 30 Jan 1972 after resolving problems with Command System.
	1 Feb 1972	14	31	7		27	
	Pass 216 to	41	25			395	
	Pass 247, or	42	4			43	
	31 Passes	51	5			-	
	Days 001-031	62	31			5,929	
		Jan 1972 Total	128	15		7,073	
Feb 1972	1 Feb 1972 to	12	29			343	Seven Master Data Records (MDR) tapes and their backups were generated with each SDR deletion. Continued high command activity. Telemetry, Tracking, and Command System performance excellent.
	1 Mar 1972	14	29	11		30	
	Pass 247 to	41	26			267	
	Pass 276, or	42	4			15	
	29 Passes	51	1			-	
	Days 031-060	62	29			7,485	
		Jan 1972 Total	118	11		8,140	
Mar 1972	1 Mar 1972 to	12	1			22	Command System performance very good, even with minor problems. MDR tapes and their backups were generated with each SDR deletion. Basic tracking plan two-way doppler tracking with two-way transfers between the prime DSN stations.
	1 Apr 1972	14	27	11		691	
	Pass 276 to	41	12			227	
	Pass 307, or	42	1			1	
	31 Passes	51	0			0	
	Days 060-091	62	26			5,823	
		Jan 1972 Total	67	11		6,764	
	Overall Total 14 Nov 1972 to 1 Apr 1972		492	69	1	32,567	

Table 2. DSN telemetry systems analysis from orbit insertion (Nov. 14, 1971) to end of primary mission (Apr. 1, 1972)

Period	No. Readings	% Within 1.0 Db of Prediction	% Within 0.3 Db of Prediction	Arithmetic Mean, Db	Variance, Db	Standard Deviation, Db	Eng Sci	Most Often Observed Value, Db	Parameter
14 Nov 1971 to 1 Dec 1971, or Day 318 through Day 334	104	80.77	34.62	0.5519	0.2002	0.4474	Both	0.1 to 0.2	SNR
17 Days, total	106	81.13	26.42	0.5264	0.1536	0.3919	Both	0.4 to 0.5	Downlink Signal Level
	76	93.42	96.05	0.3671	0.1273	0.3568	-	0.1 to 0.2	Uplink Signal Level
1 Dec 1971 to 1 Jan 1972, or Day 335 through Day 365	86	90.70	34.88	0.4442	0.1008	0.3176	Eng	0.2 to 0.3	SNR
31 Days, total	85	85.53	36.47	0.4941	0.1608	0.4010	Sci	0.2 to 0.3	SNR
	112	83.04	26.79	0.5562	0.1355	0.3680	Both	0.9 to 1.0	Downlink Signal Level
	88	89.77	35.23	0.4420	0.1234	0.3513	-	0.3 to 0.4	Uplink Signal Level
1 Jan 1972 to 1 Feb 1972, or Day 001 through Day 031	87	95	40	0.1	0.3	0.5	Eng	0.3 to 0.4	SNR
31 Days, total	87	85	25	0.2	0.4	0.8	Sci	0.4 to 0.5	SNR
	87	85	23	0.3	0.5	0.9	Both	0.5 to 0.6	Downlink Signal Level
	88	98	49	0.1	0.3	0.6	-	0.2 to 0.3	Uplink Signal Level
1 Feb 1972 to 1 Mar 1972, or Day 032 through Day 060	84	88	44	0.2	0.3	0.7	Eng	0.2 to 0.3	SNR
29 Days, total	84	90	24	0.3	0.5	0.8	Sci	0.9 to 1.0	SNR
	113	65	17	0.4	0.8	1.1	Both	> 1.0	Downlink Signal Level
	84	99	51	0.1	0.2	0.4	-	0.1 to 0.3	Uplink Signal Level
1 Mar 1972 to 1 Apr 1972, or Day 061 through Day 091	67	69	24	0.3	0.6	1.1	Eng	0.2 to 0.3	SNR
31 Days, total	46	72	28	0.2	0.7	1.0	Sci	0.1-0.2	SNR
	67	54	10	0.5	0.9	1.3	Both	0.8-0.9	Downlink Signal Level
	41	90	29	0.2	0.5	0.6	-	> 1.0	Uplink Signal Level
								0.6 to 0.7	Signal Level

Table 3. DSS 12 occultation view period

Day	Pass	Enter occultation	Exit occultation
318	169	0202:05.20	0238:13.84
319	170	0310:02.30	0345:58.80
320	171	0307:57.40	0343:47.60
321	172	0305:35.80	0341:21.80
322	173	0302:52.00	0338:30.50
323	174	0259:41.35	0335:14.57
324	175	0256:05.67	0331:32.60
325	176	0254:10.05	0327:27.55
326	177	0247:56.30	0323:04.44
327	178	0243:31.95	0318:30.32
328	179	0239:07.10	0313:51.30
329	180	0234:45.20	0309:17.40
330	181	0230:35.34	0304:53.70
331	182	0226:45.70	0300:52.40
332	183	0223:19.10	0257:06.00
333	184	0220:17.90	0253:45.60
334	185	0217:42.30	0250:51.30

Table 4. DSS 14 occultation view period

Day	Pass	Enter occultation	Exit occultation
318	169	0202:05.20	0238:13.84
319	170	0310:02.00	0345:58.22
320	171	0307:56.51	0343:50.83
321	172	0305:34.15	0341:20.50
322	173	0302:50.67	0338:30.50
323	174	0259:41.30	0335:14.50
324	175	0256:05.30	0331:32.50
325	176	0252:09.80	0327:28.85
326	177	0247:56.00	0323:04.00
327	178	0243:31.45	0318:29.05
328	179	0239:05.58	0313:51.03
329	180	0234:44.28	0309:16.25
330	181	0230:35.34	0304:53.45
331	182	0226:45.33	0300:48.70
332	183	0223:19.03	0257:05.32
333	184	0220:17.59	0253:46.90
334	185	0217:42.18	0250:52.55

Table 5. DSS 41 occultation view period

Day	Pass	Enter occultation	Exit occultation
318	168	1327:57.20	1404:04.70
319	169	1436:03.95	1512:08.40
320	170	1509:00.30	1544:54.30
321	171	1506:47.25	1542:37.60
322	172	1504:18.25	1539:57.70
323	173	1501:21.75	1536:54.75
324	174	1458:00.07	1533:26.00
325	175	1454:13.60	1529:33.90
326	176	1450:07.85	1525:17.95
327	177	1445:46.98	1520:55.45
328	178	1441:12.60	1516:11.35
329	179	1436:55.49	1511:40.55
330	180	1432:38.70	1507:07.50
331	181	1428:38.60	1502:50.30
332	182	1424:58.60	1458:55.10
333	183	1421:43.70	1455:22.35
334	184	1418:56.20	1452:16.20

Table 6. DSS 62 occultation view period

Day	Pass	Enter occultation	Exit occultation
319	170	1436:07.80	1512:08.40
320	171	1509:02.70	1544:54.10
321	172	1506:47.90	1542:35.40
322	173	1504:18.80	1539:57.90
323	174	1501:22.35	1536:54.20
324	175	1458:00.23	1533:24.62
325	176	1454:13.13	1529:31.05
326	177	1450:07.45	1525:16.82
327	178	1445:46.60	1520:47.43
328	179	1441:20.15	1516:10.87
329	180	1436:55.13	1511:33.66
330	181	1432:38.24	1507:04.25
331	182	1428:38.30	1502:49.36
332	183	1424:58.26	1458:54.15
333	184	1421:43.48	1455:22.35
334	185	1418:56.00	1452:15.20

Table 7. Project tracking tapes for occultation experiments

Day	Zenith Tape No.	Nadir Tape No.	Backup Tape No.
Mondays	6471	6481	6491
Tuesdays	6472	6482	6492
Wednesdays	6473	6483	6493
Thursdays	6474	6484	6494
Fridays	6475	6485	6495
Saturdays	6476	6486	6496
Sundays	6477	6487	6497

Table 8. Predicts accuracy

Day	Occ	Enter -2 hr	Peak	Enter	Exit	Exit +2 hr
2-Way Doppler Residuals (Hz)						
319	G	+13	+31	-61	-28	-10
	N	+49	+112	-230	-62	-11
320	G	N/A	N/A	N/A	+11	+0
	N	-9	-26	+56	+18	+0
321	G	-13	-37	+78	+62	+0
	N	-19	-56	+116	N/A	+1
322	G	-25	-73	+147	+24	+2
	N	-33	-93	+194	+64	+2
323	G	+2	+6	-10	-3	+1
	N	+3	+10	-11	-5	+0
324	G	+0	+3	-1	+0	+1
	N	-2	+9	-1	-1	+1
325	G	+1	+8	-9	-3	+1
	N	+5	+9	-4	-4	-1
326	G	+3	+13	-11	-5	-1
	N	+4	+20	-11	-3	+0
327	G	+8	+27	-44	-16	-0
	N	+10	+32	-51	-18	-0
328	G	+11	-39	-71	-23	-1
	N	+8	-27	-44	-14	-1
329	G	+11	+34	-51	-20	-1
	N	+16	+50	-83	-28	-2
330	G	+19	+60	-93	-35	-2
	N	+26	-77	-138	-48	-3
331	G	+18	+53	-92	-23	-2
	N	+25	+78	-128	-45	-3
332	G	+32	+100	-169	-94	-3
	N	+39	+126	-211	-73	-5
333	G	+50	+157	-262	-94	N/A
	N	+59	+185	-319	-99	-7
334	G	+72	+222	-370	-133	-8
	N	N/A	N/A	-420	-145	-3
335	G	+5	+12	-19	-10	-2
	N	+8	+23	-40	-18	-2
336	G	+13	+37	-64	-25	-3
	N	+18	+54	-93	-31	-4
337	G	+24	+71	-122	-49	-5
	N	+30	+90	-156	-62	-6
338	G	+46	+109	-186	-56	-7
339	N	N/A	N/A	N/A	-1	-1
	G	+3	+5	-7	-4	-1
	N	+5	+12	-20	-9	-2
340	G	+9	+24	-49	-17	-3
	N	+14	+37	-64	-25	-3
341	G	+20	+58	-94	-37	-4
	N	+25	+79	-129	-50	-5
342	G	+32	+100	-161	-62	-5
	N	+1	+3	-5	-2	-1
G = Goldstone occultation. N = Nadir occultation. Horizontal lines indicate a new PET.						

Table 9. Cumulative command activity to date

Activity	DSS					
	12	14	41	42	51	62
Commands	3,303	818	3,359	65	109	29,578
Percent down*	3.93	3.9	3.2	2.36	3.60	4.0
*Includes 360/75 and HSDL outages.						

Table 10. Four-month summary of command activity

Activity	DSS						
	12	14	41	42	51	62	Total
December							
Commands	577	17	425	0	0	6827	7846
Aborts	3	0	0	0	0	0	3
Percent Down*	4.48	0	5.17	0	0	3.02	-
January							
Commands	679	27	395	43	0	5929	7073
Aborts	0	0	0	0	0	0	0
Percent Down*	2.33	0	4.25	0	0	2.84	-
February							
Commands	343	30	267	15	0	7485	8140
Aborts	0	0	3	0	0	2	5
Percent Down*	5.86	3.58	4.28	Nil	0	3.6	-
March							
Commands	22	691	227	1	0	5823	6763
Aborts	0	0	0	0	0	0	0
Percent Down*	Nil	3.1	2.65	Nil	0	2.12	-
*Includes 360/75 and HSDL outages							

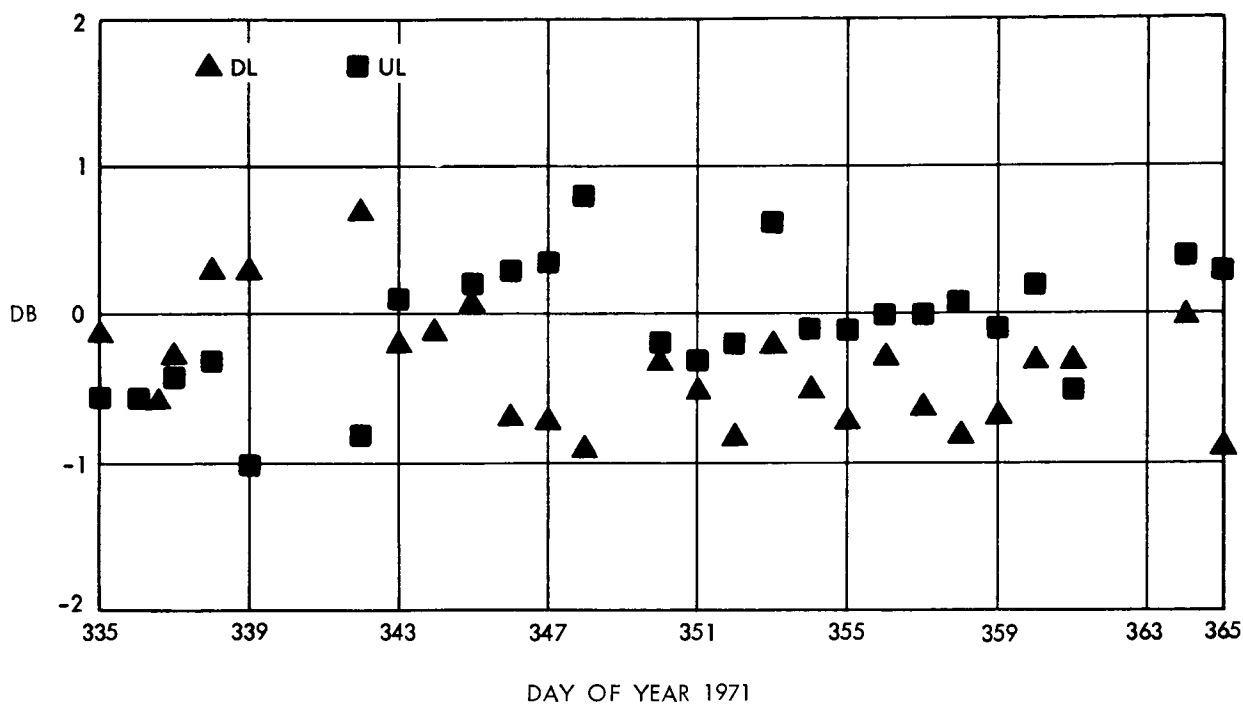


Fig. 7. Residual data plot for DSS 12, December 1971

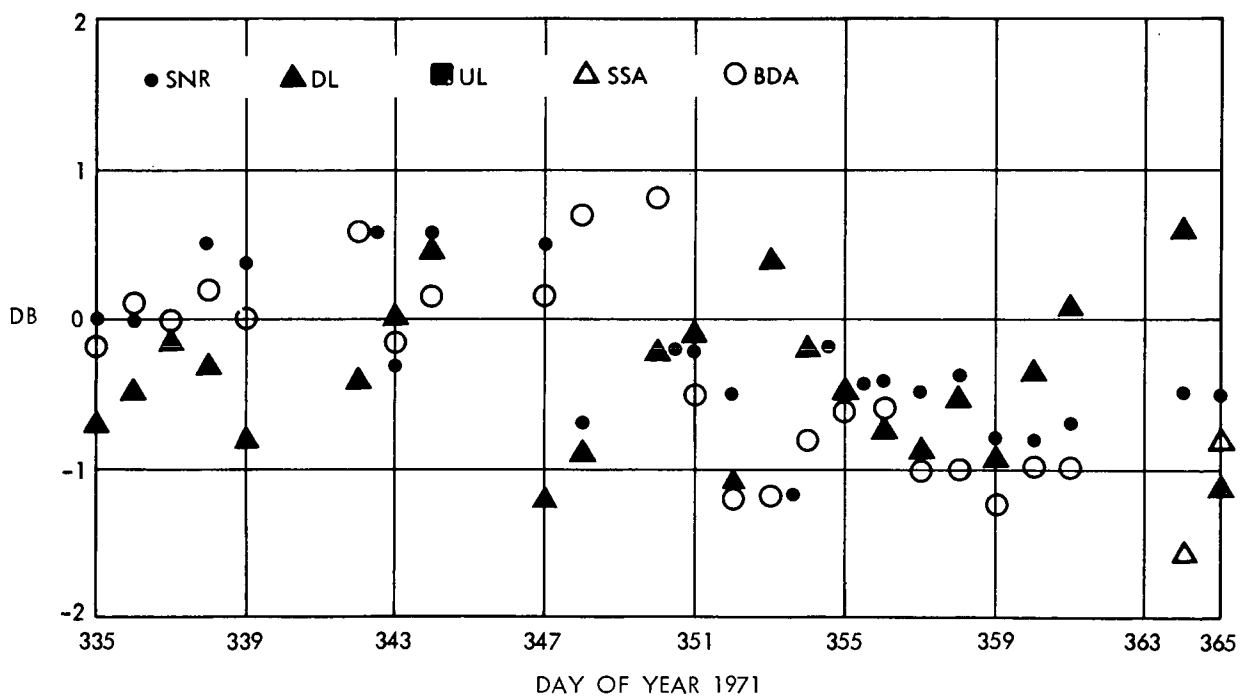


Fig. 8. Residual data plot for DSS 14, December 1971

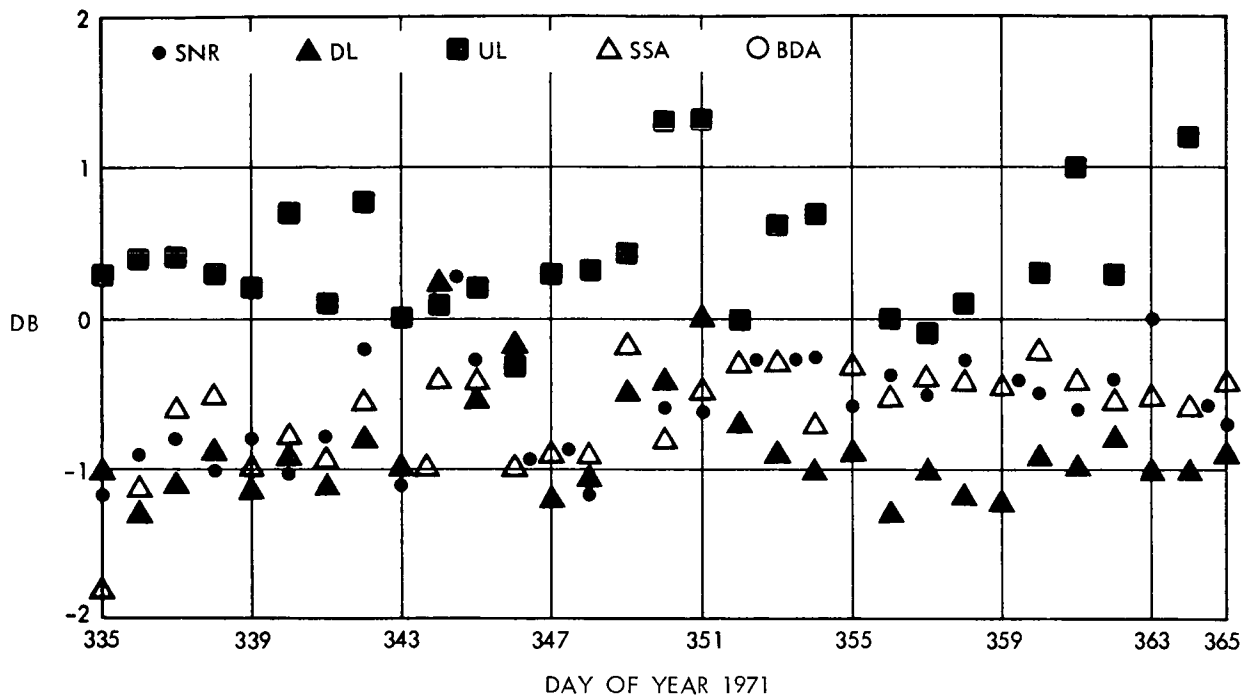


Fig. 9. Residual data plot for DSS 41, December 1971

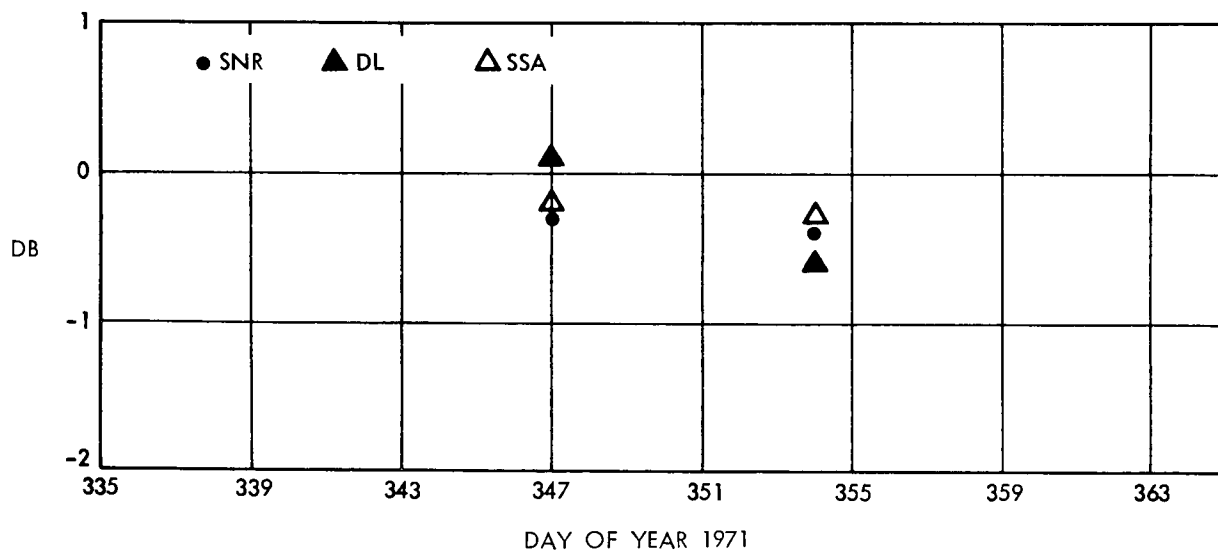


Fig. 10. Residual data plot for DSS 42, December 1971

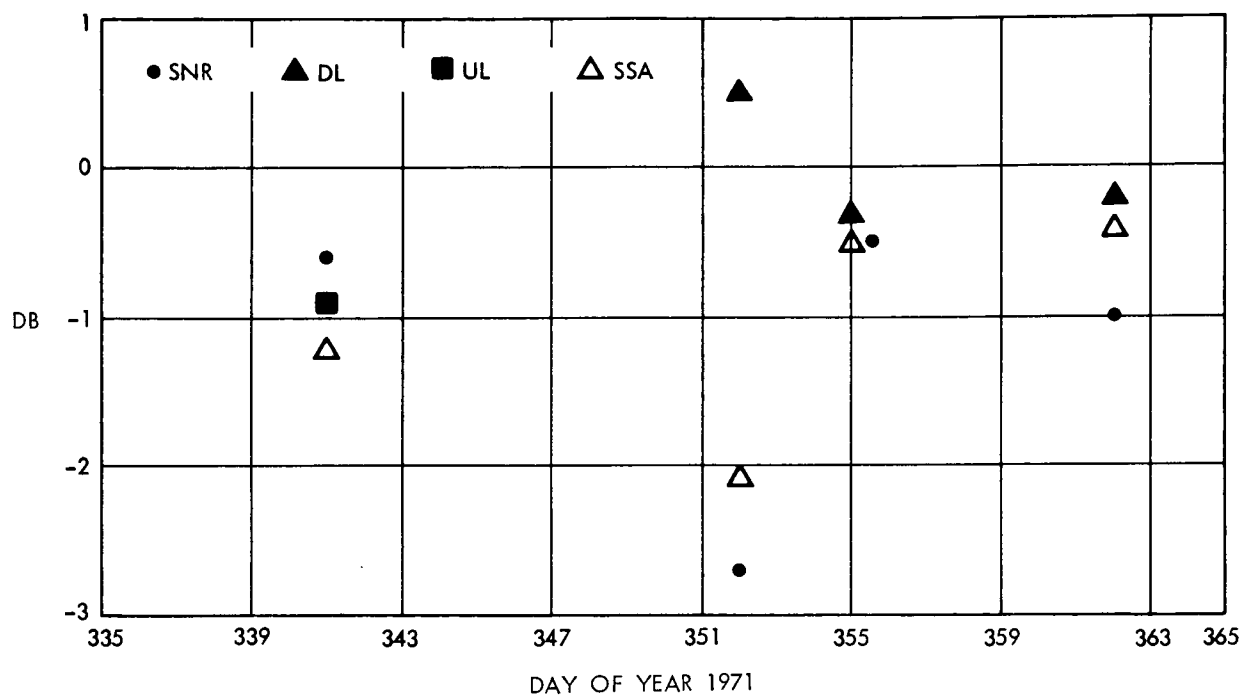


Fig. 11. Residual data plot for DSS 51, December 1971

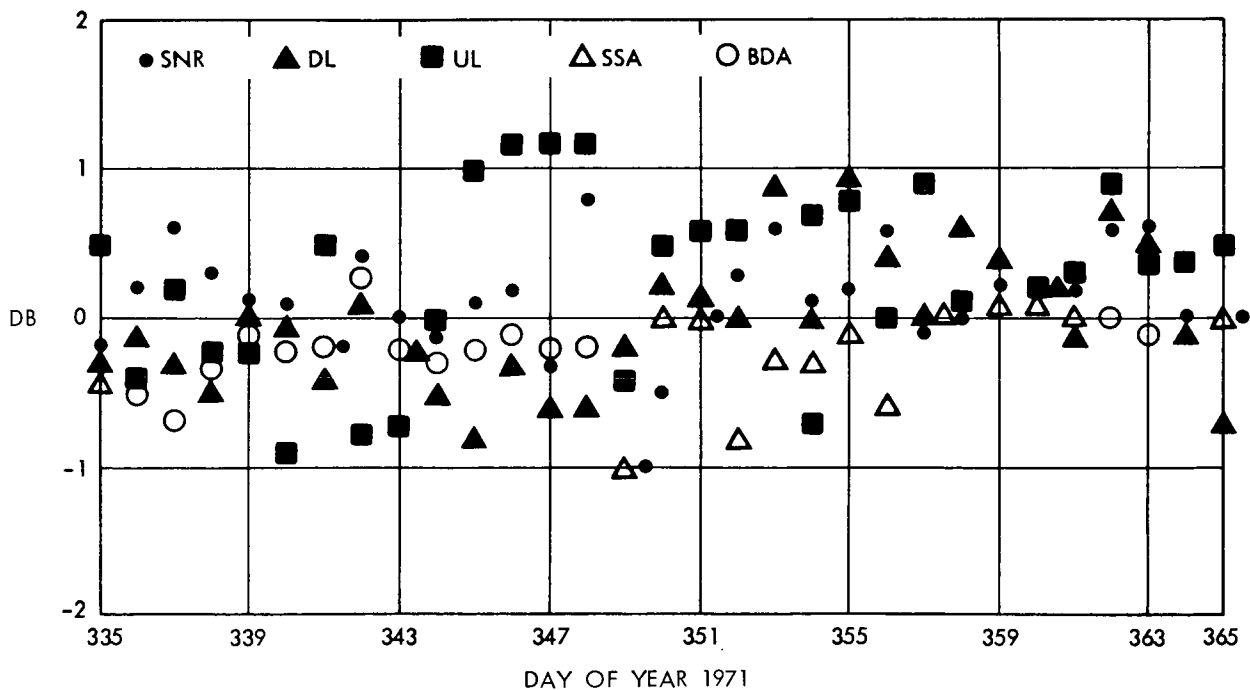


Fig. 12. Residual data plot for DSS 62, December 1971

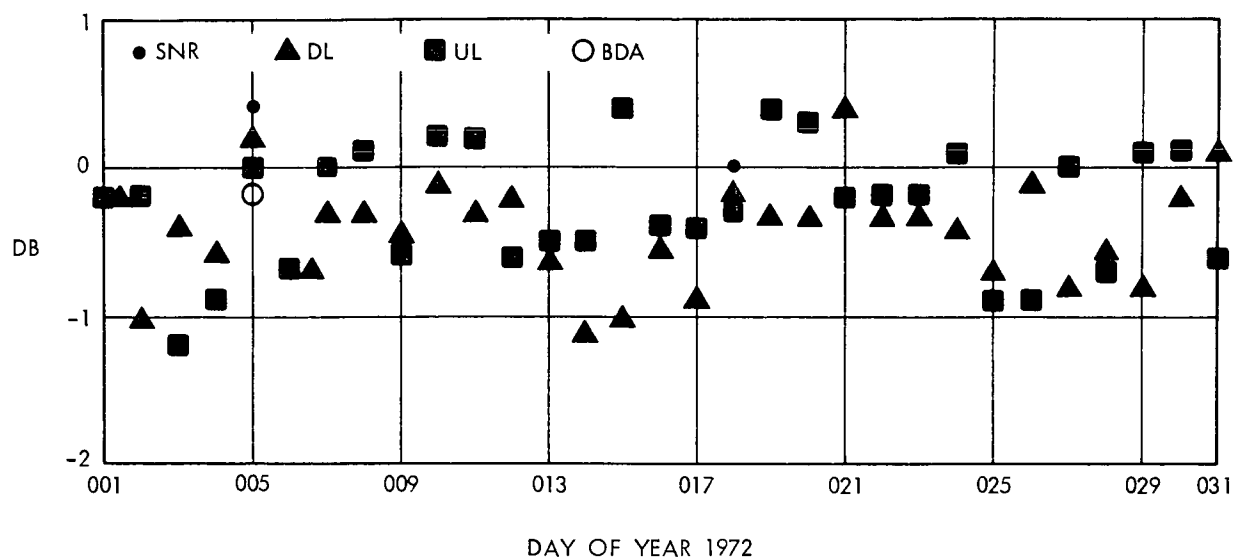


Fig. 13. Residual data plot for DSS 12, January 1972

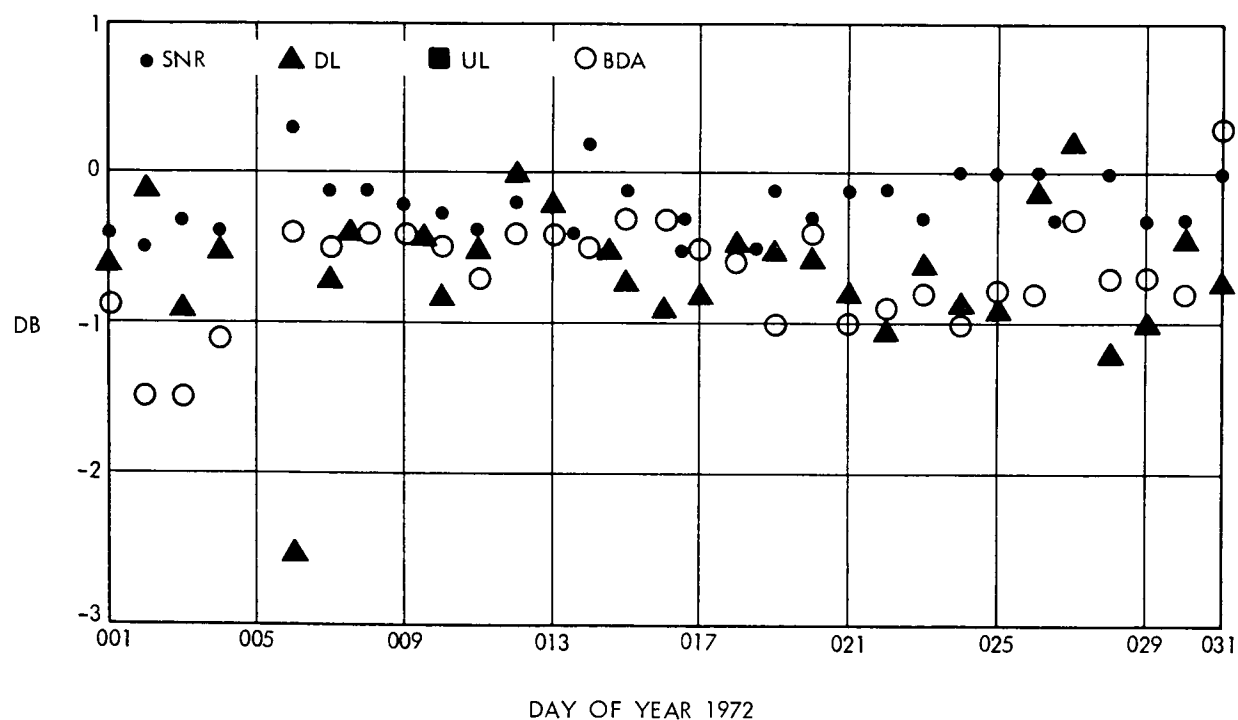


Fig. 14. Residual data plot for DSS 14, January 1972

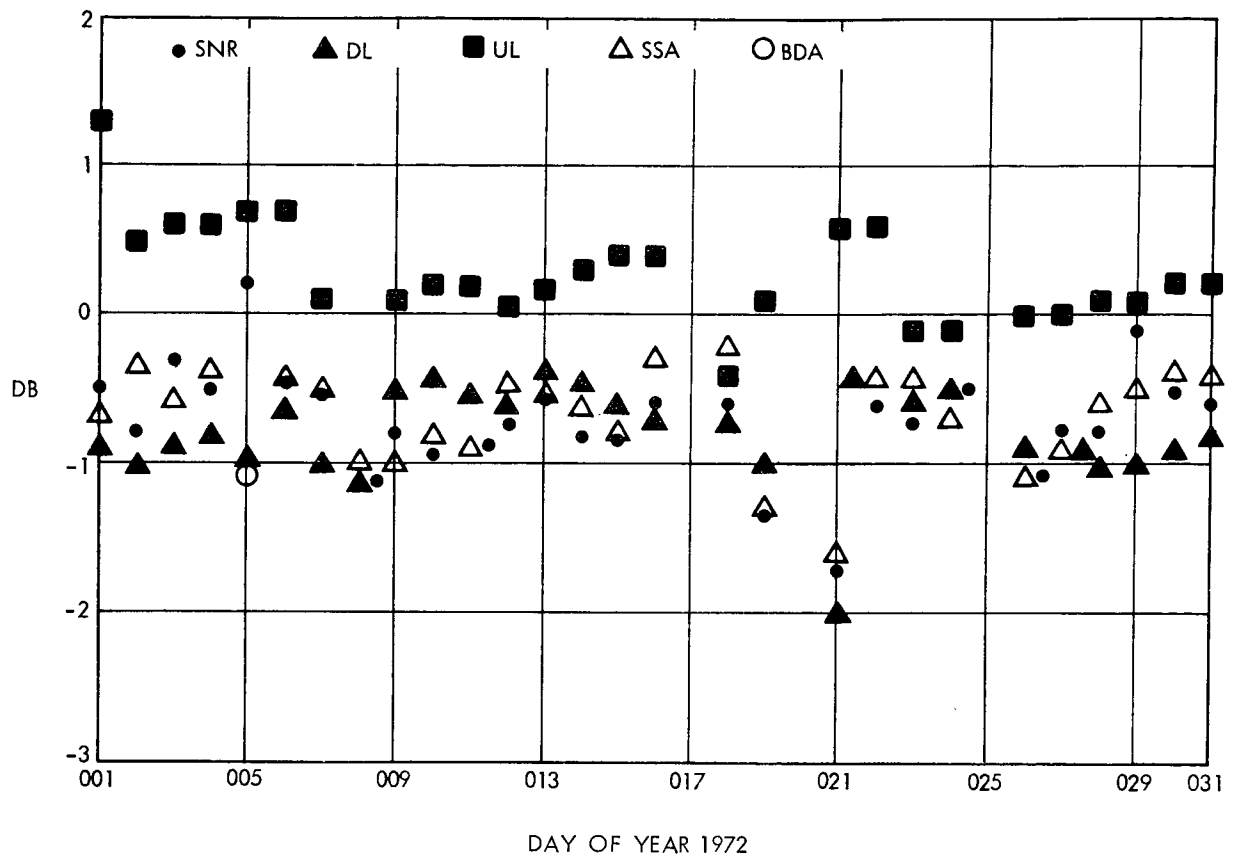


Fig. 15. Residual data plot for DSS 41, January 1972

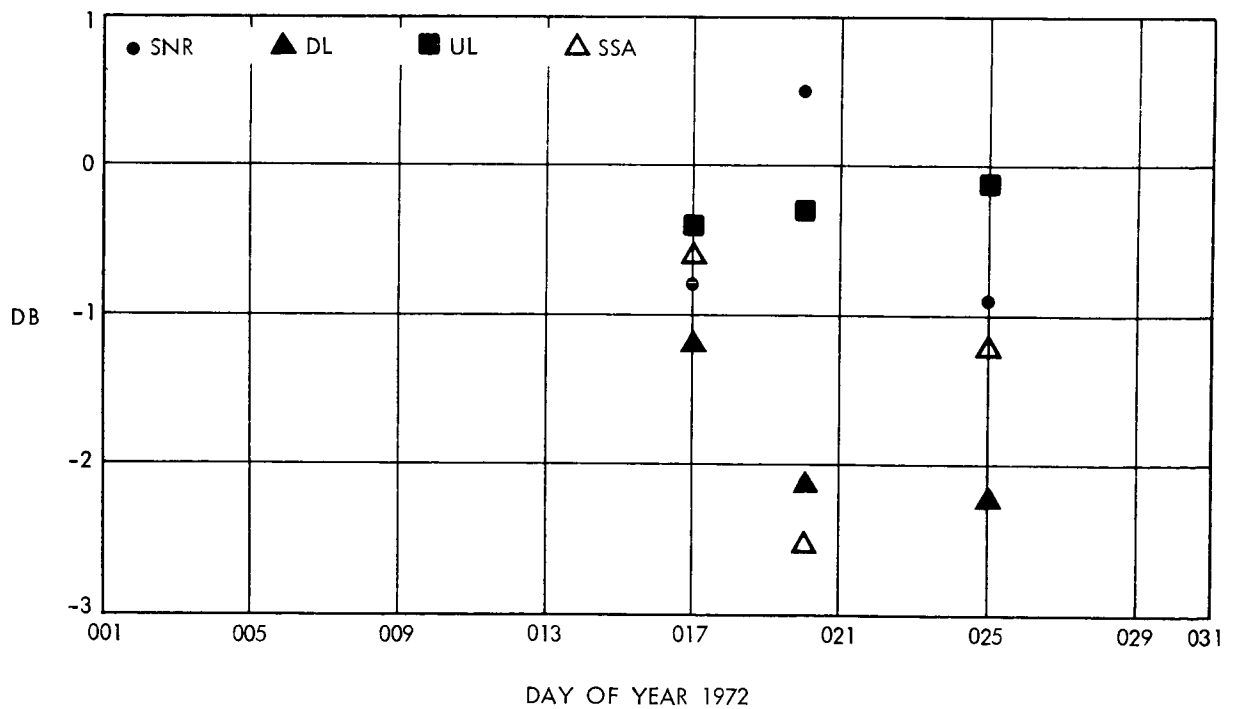


Fig. 16. Residual data plot for DSS 42, January 1972

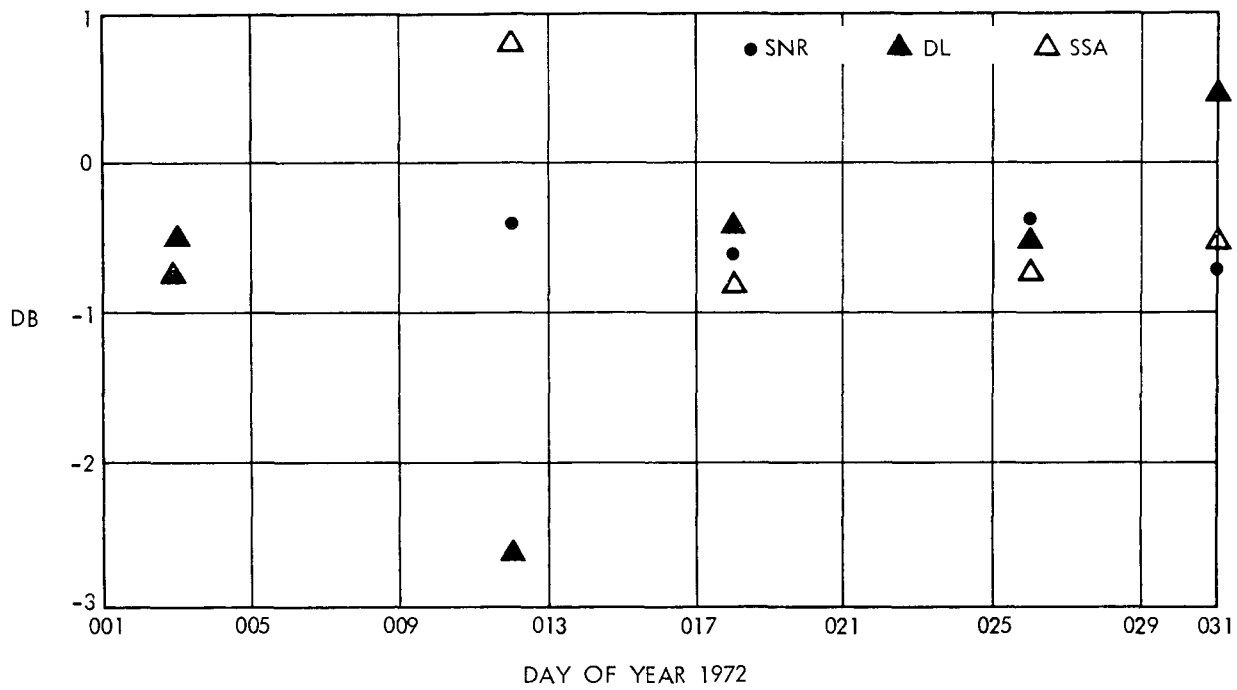


Fig. 17. Residual data plot for DSS 51, January 1972

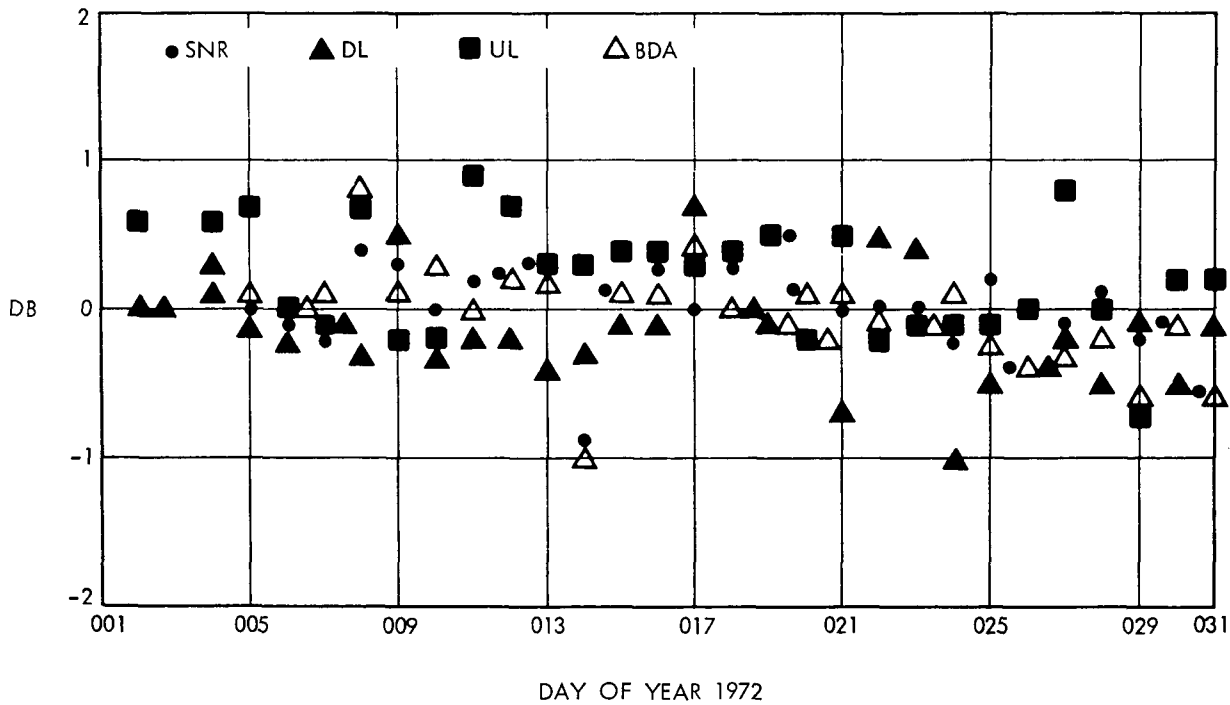


Fig. 18. Residual data plot for DSS 62, January 1972

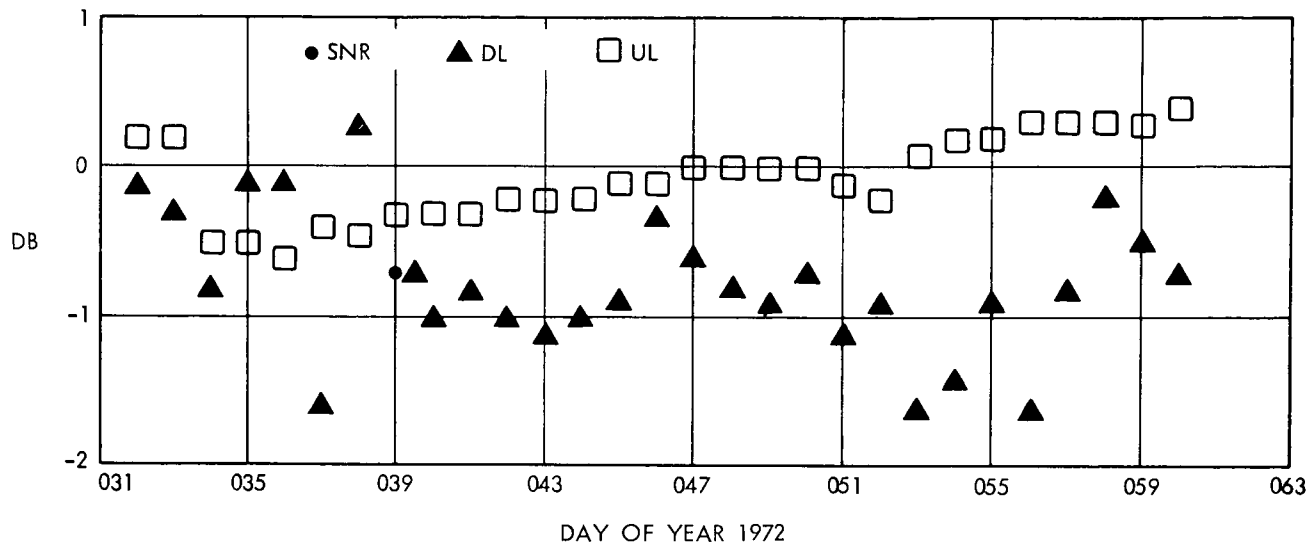


Fig. 19. Residual data plot for DSS 12, February 1972

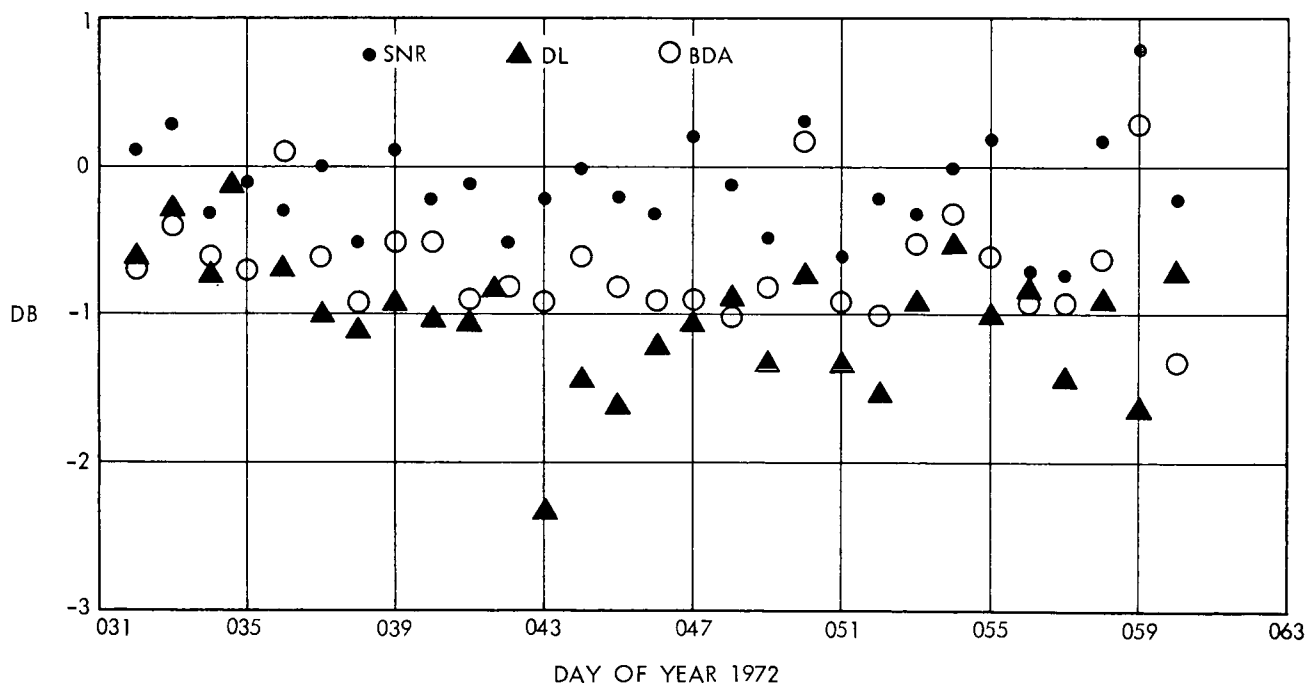


Fig. 20. Residual data plot for DSS 14, February 1972

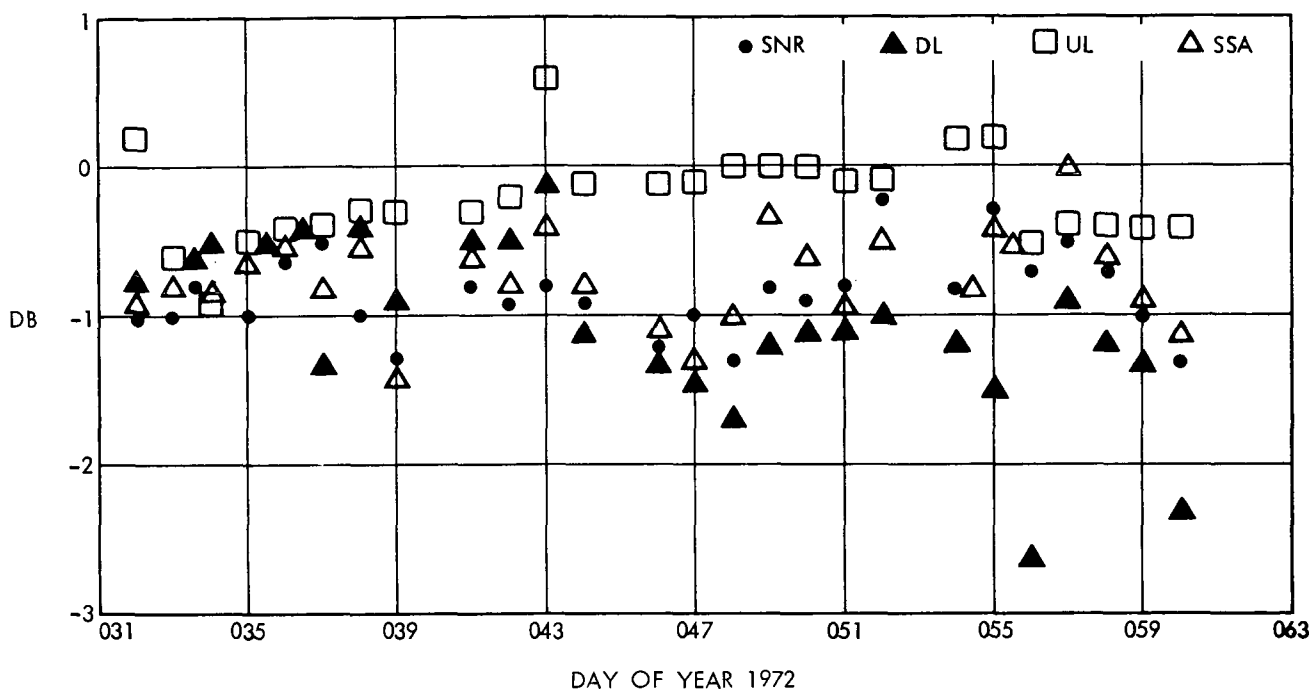


Fig. 21. Residual data plot for DSS 41, February 1972

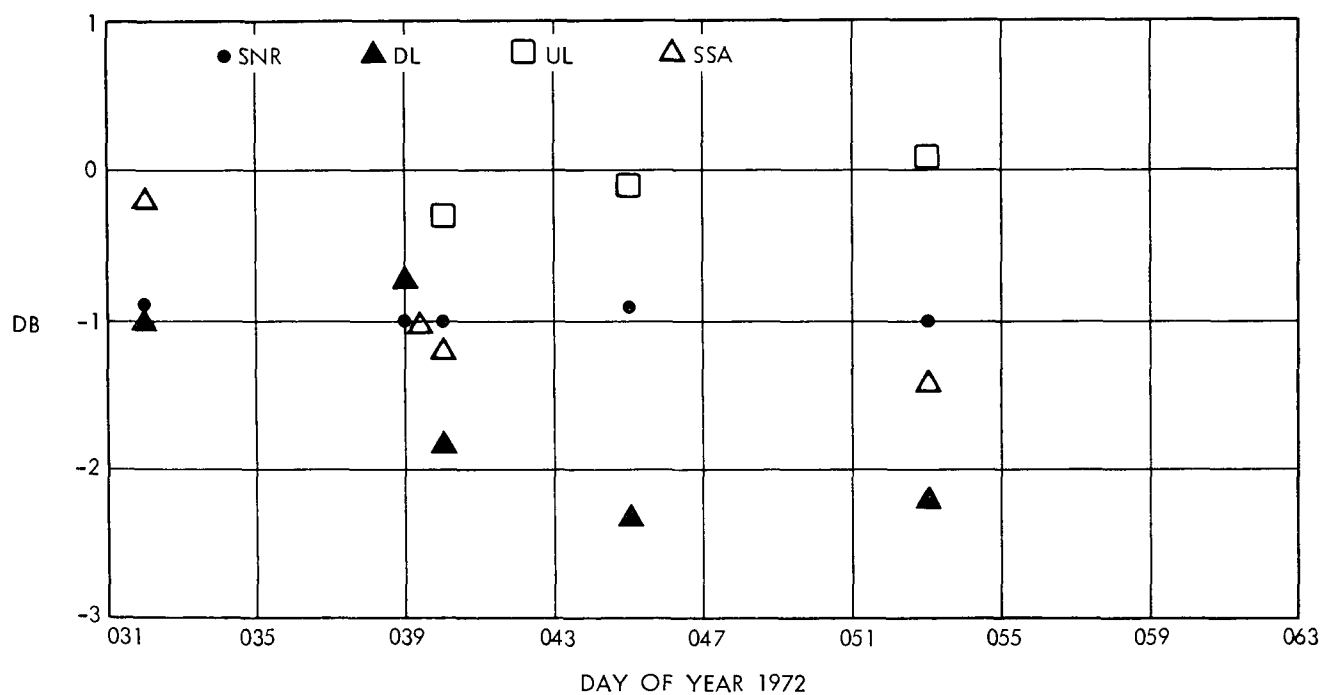


Fig. 22. Residual data plot for DSS 42, February 1972

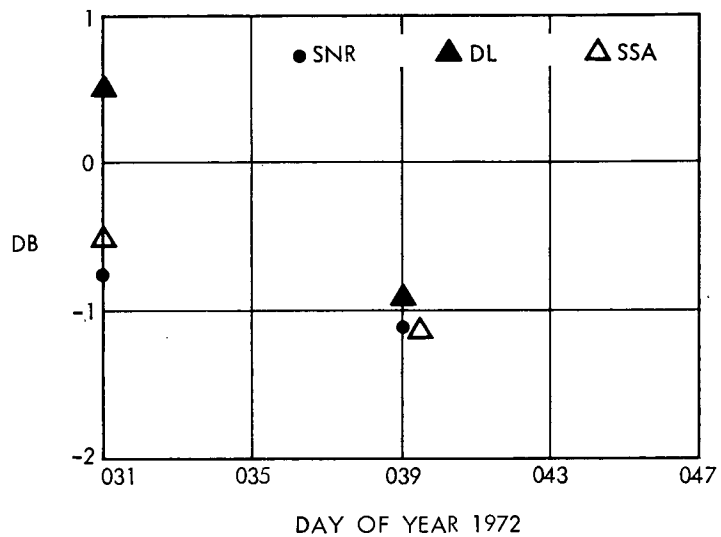


Fig. 23. Residual data plot for DSS 51, February 1972

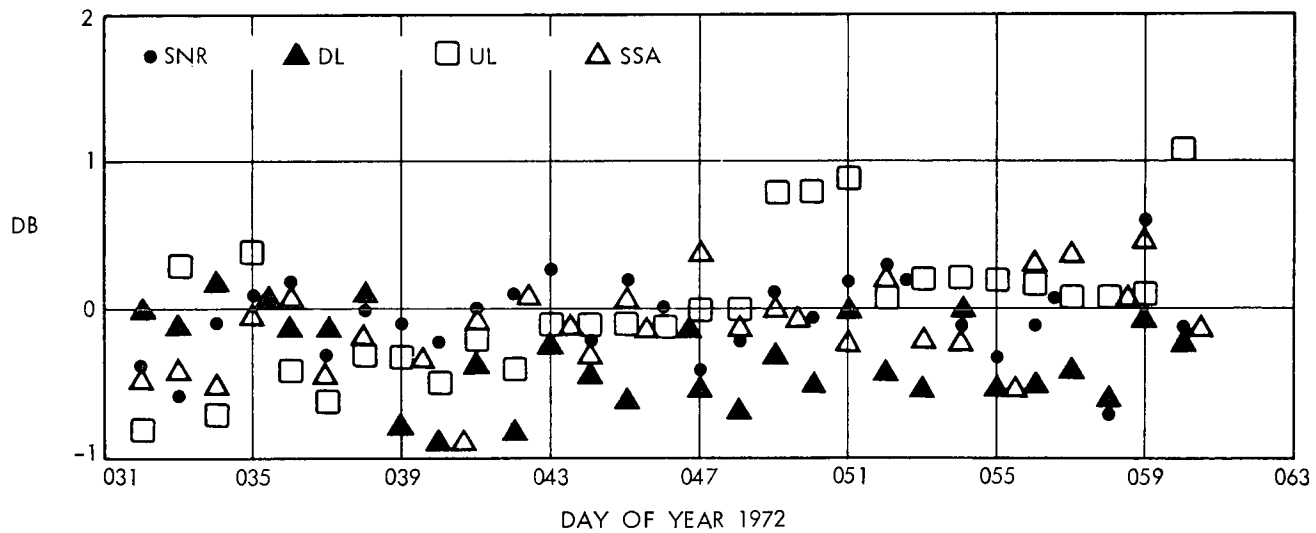


Fig. 24. Residual data plot for DSS 62, February 1972

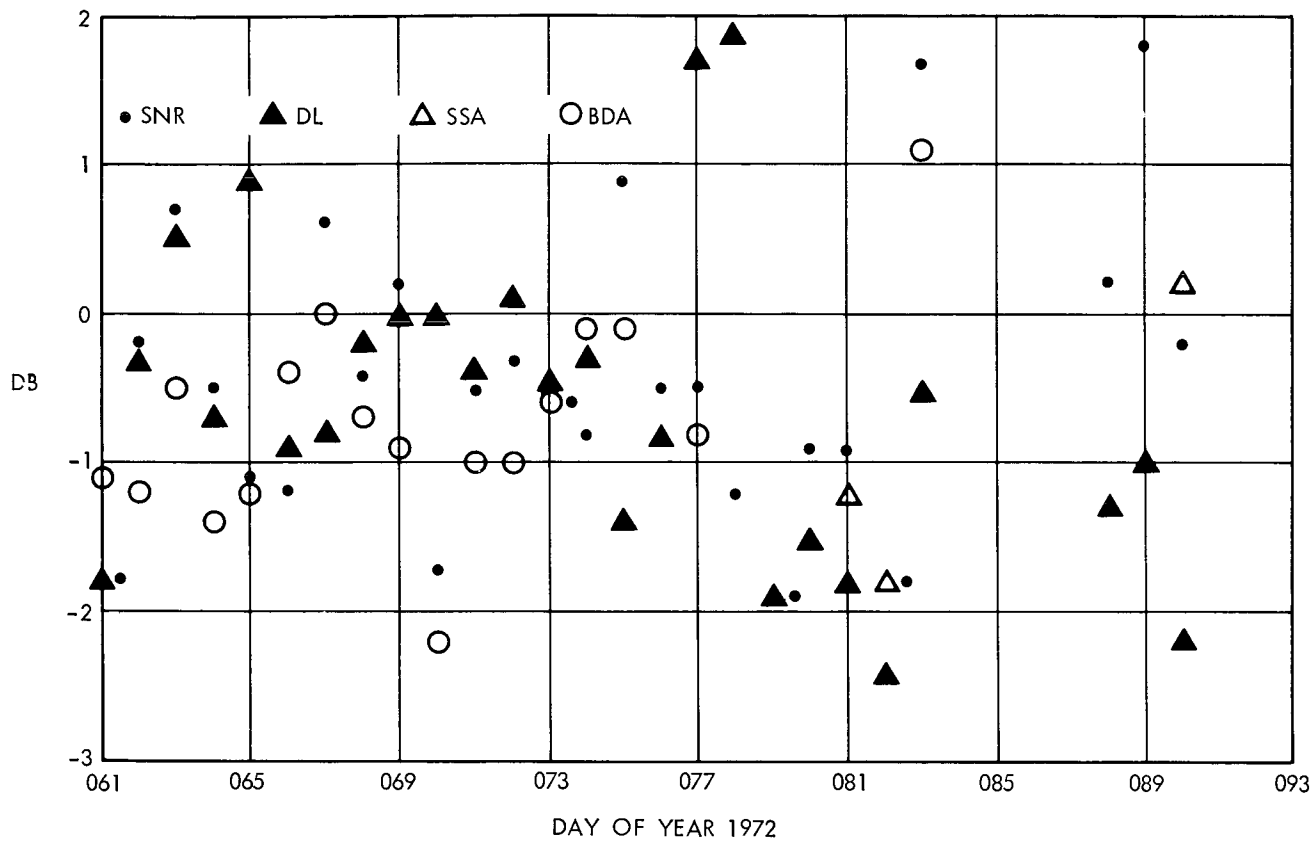


Fig. 25. Residual data plot for DSS 14, March 1972

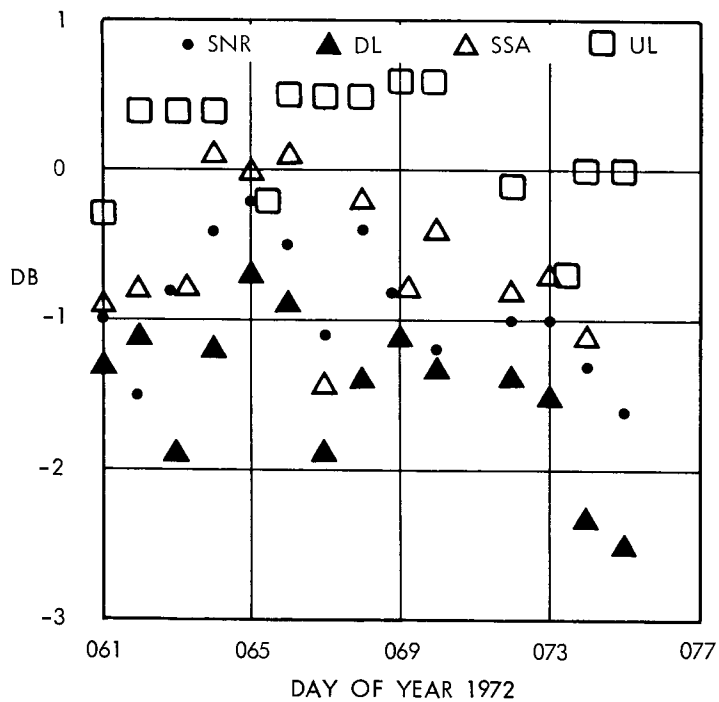


Fig. 26. Residual data plot for DSS 41, March 1972

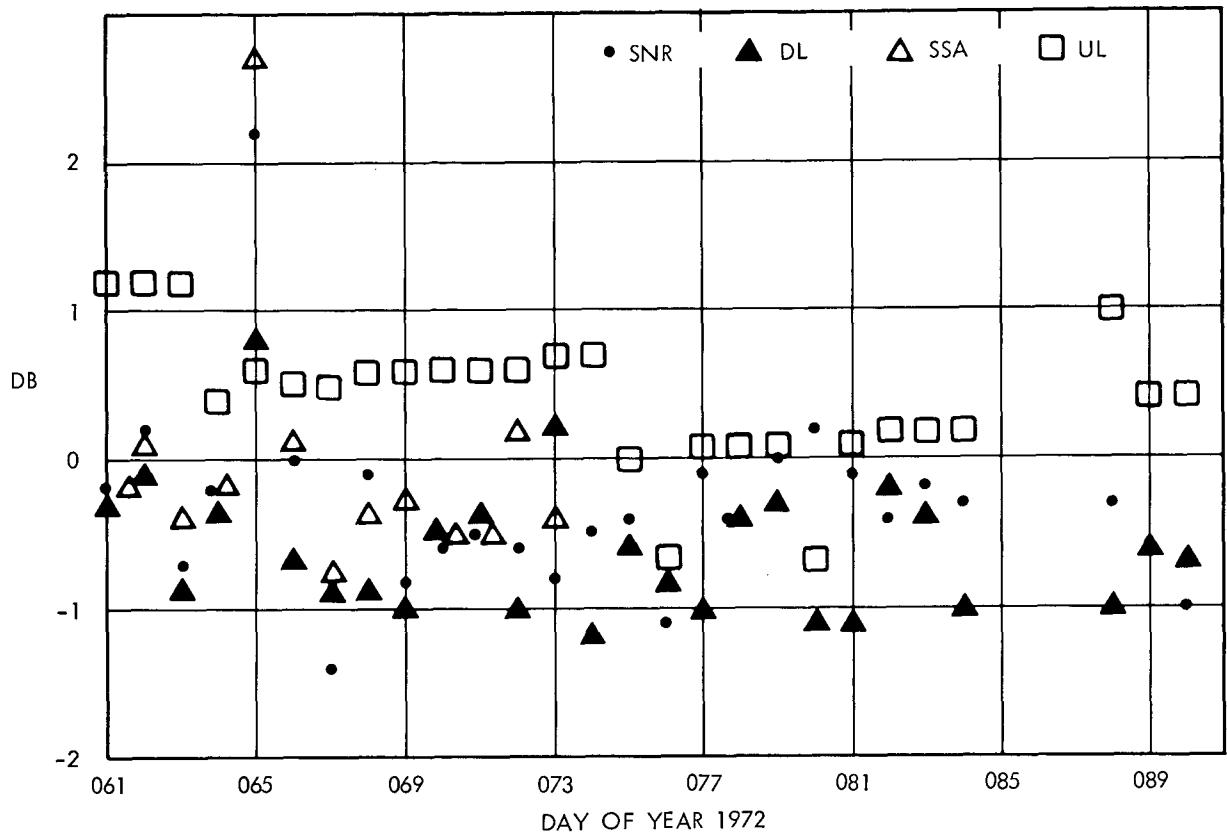


Fig. 27. Residual data plot for DSS 62, March 1972

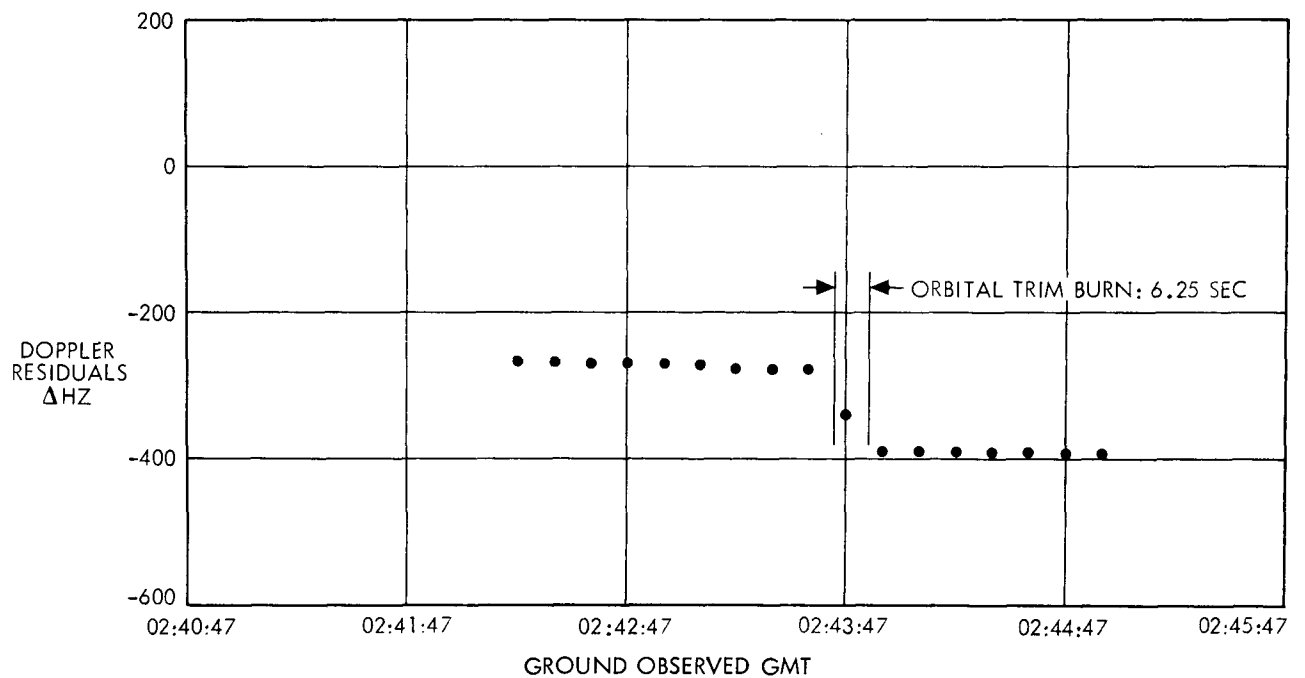


Fig. 28. Doppler residual shift during orbital trim maneuver

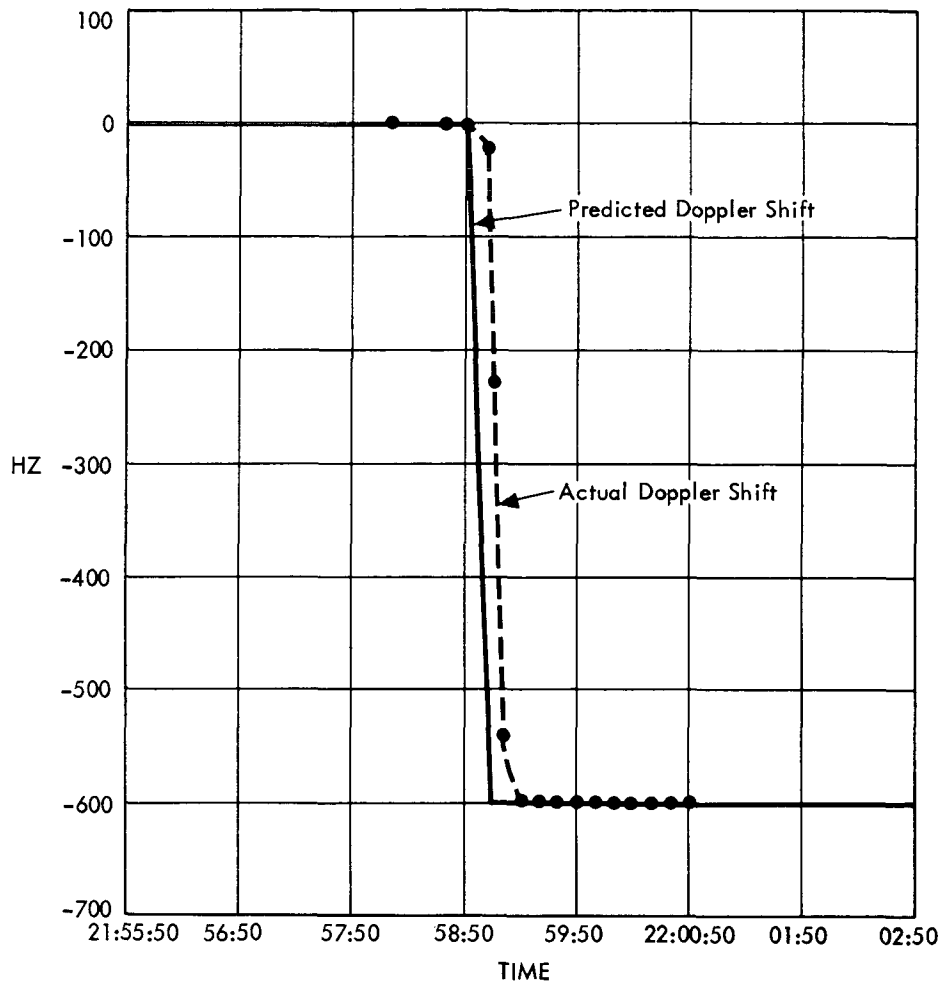


Fig. 29. Second orbital trim maneuver

OCCULTATION EVENTS DAY 348 GOLD. ☐
 NADIR ☒
 HANDOVER TO OCCULT TSF 5534
 ENTER OCC AT 13 27 59
 TXR OFF AFTER ENTER OCC
 TXR ON AT 14 03 00 FREQ 5246
 TUNE AT 60 HZ-MIN TO TSF 5256
 EXIT OCC AT 14 04 09

Fig. 30. Example of occultation predicts message

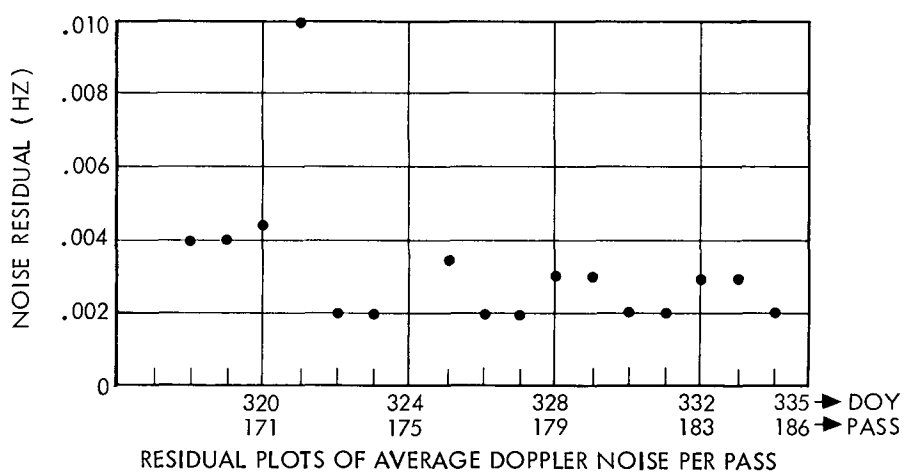
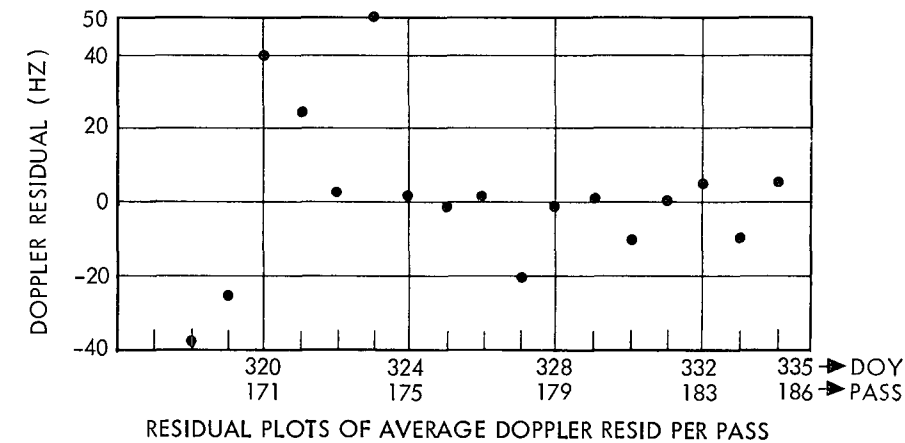


Fig. 31. DSS 12 average residual plots, November 14-30, 1971

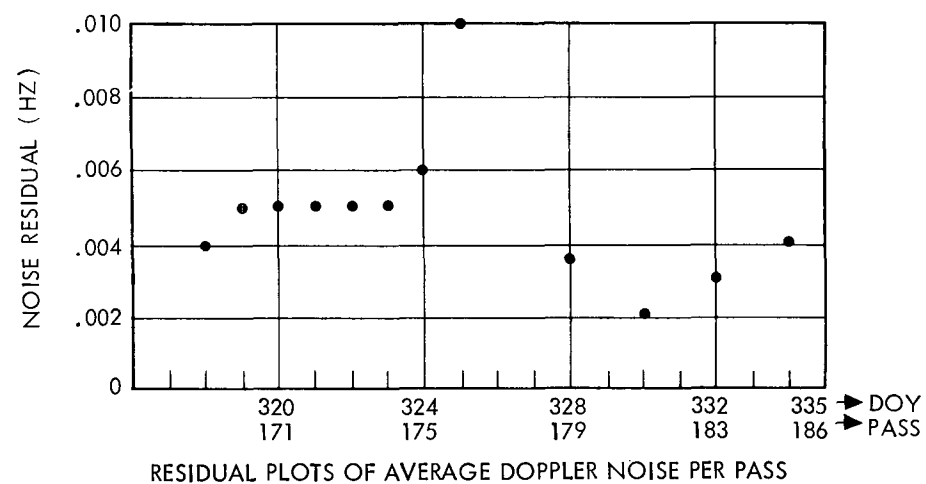
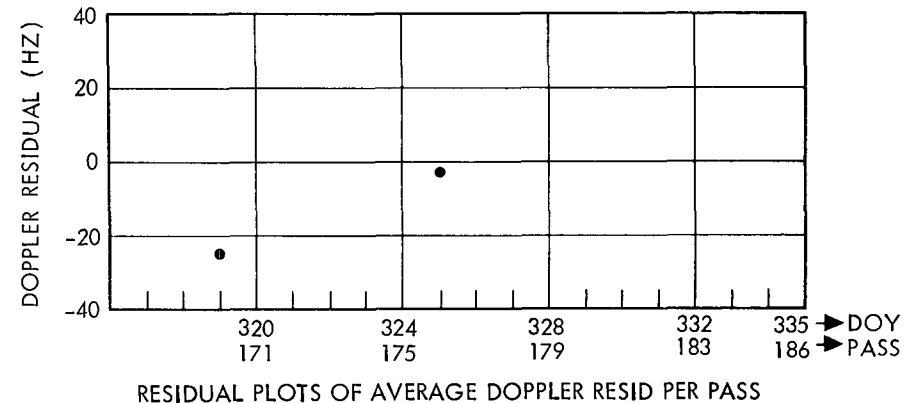


Fig. 32. DSS 14 average residual plots, November 14-30, 1971

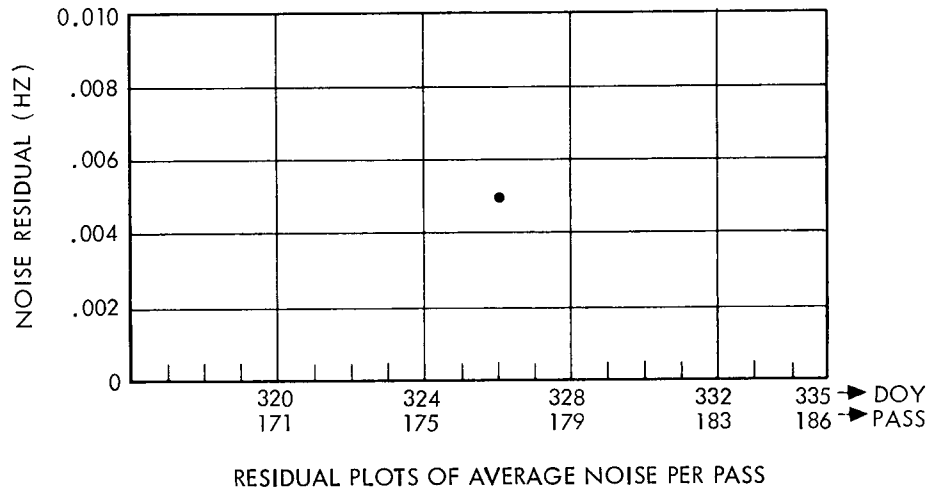
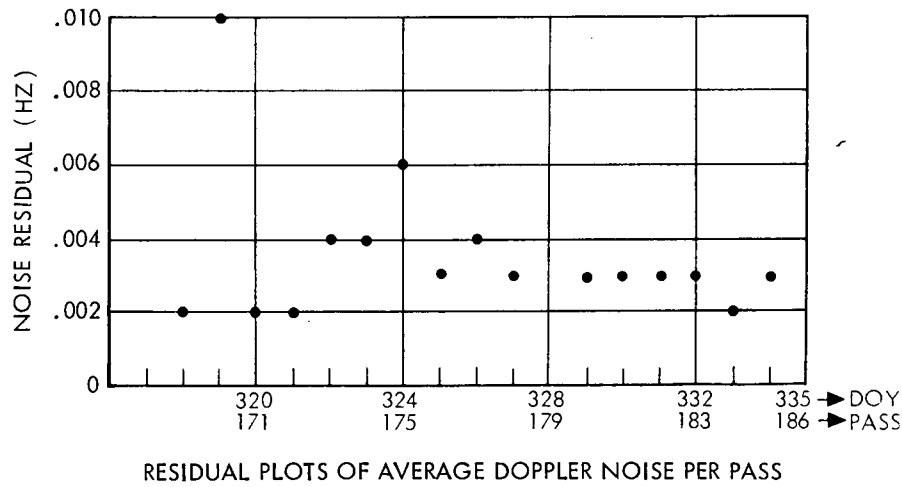
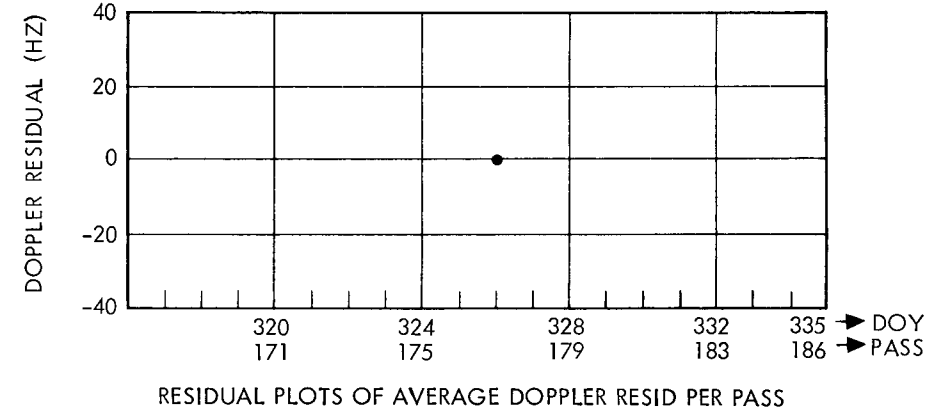
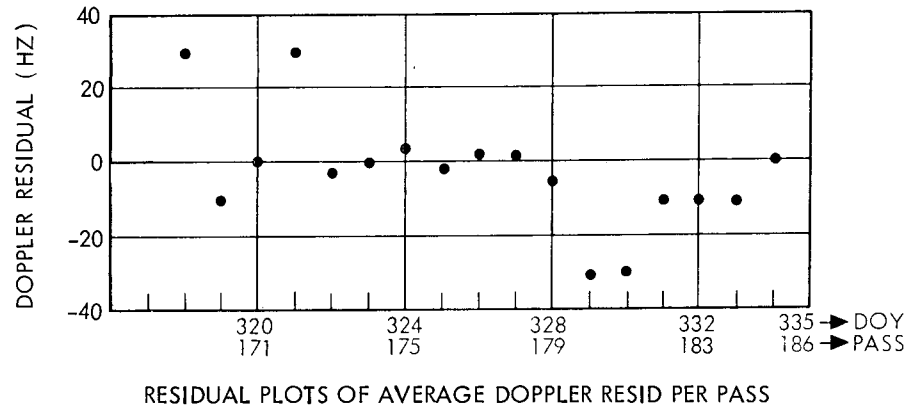


Fig. 33. DSS 41 average residual plots, November 14-30, 1971

Fig. 34. DSS 51 average residual plots, November 14-30, 1971

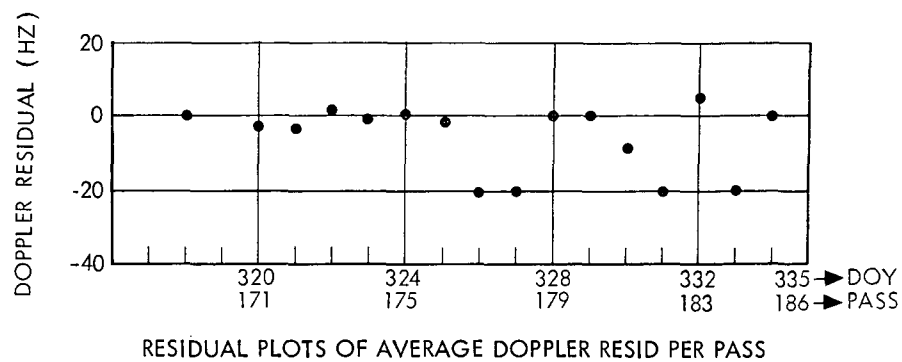


Fig. 35. DSS 62 average residual plots, November 14-30, 1971

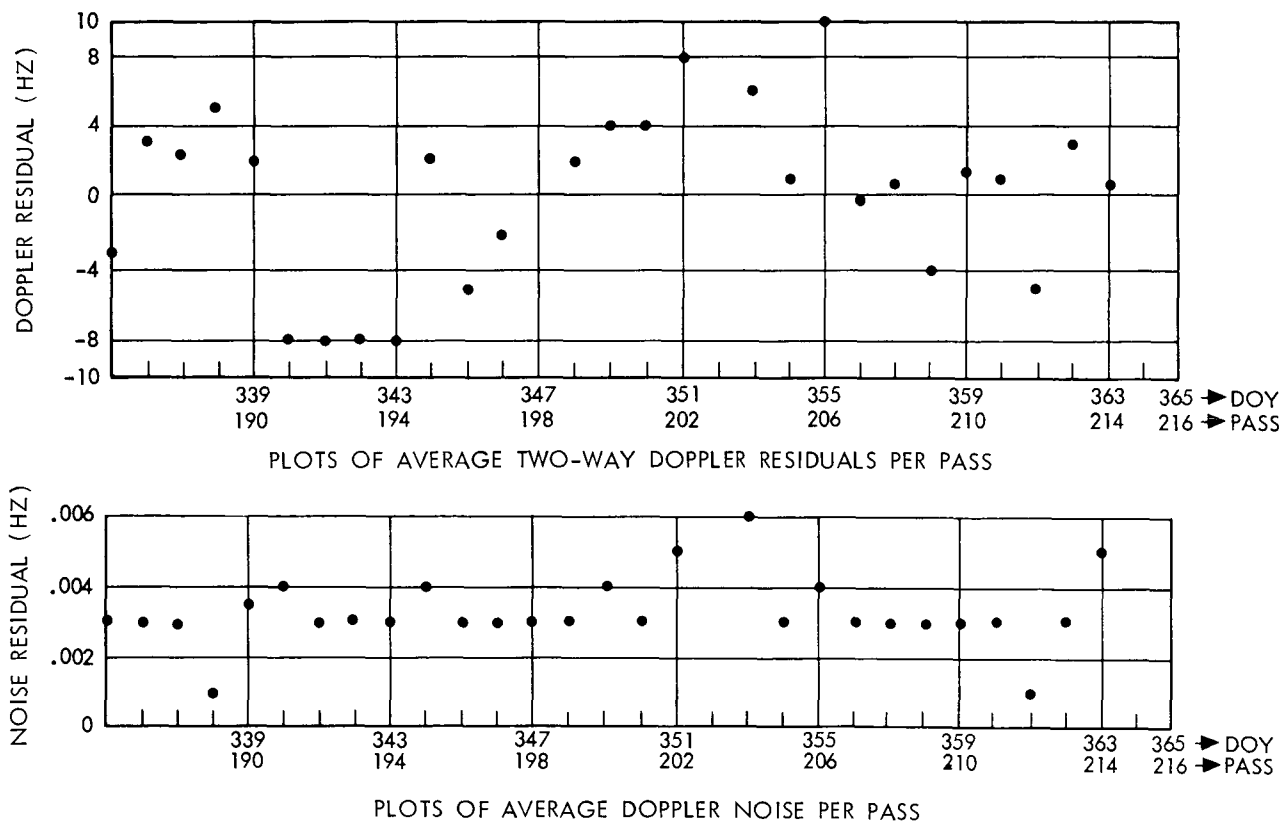
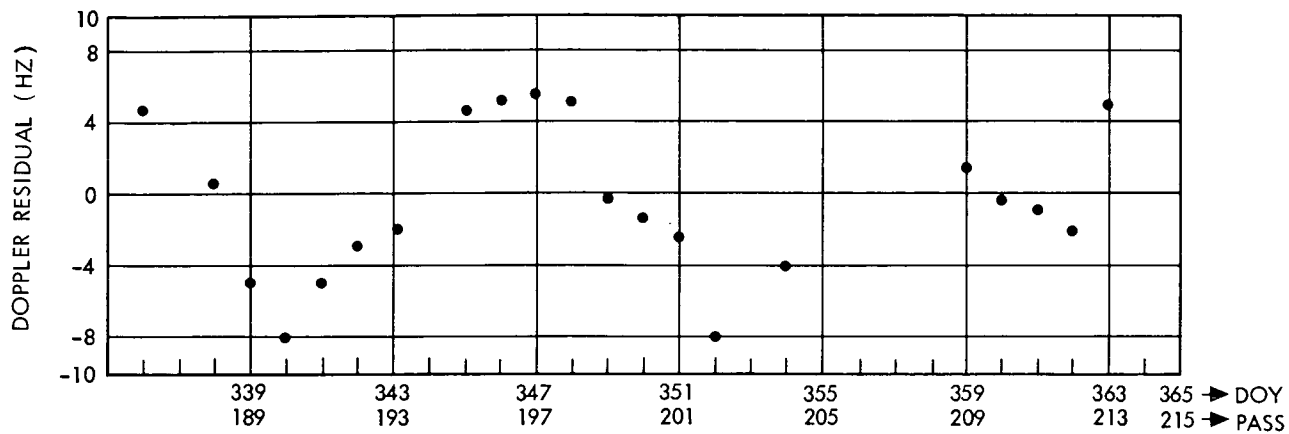
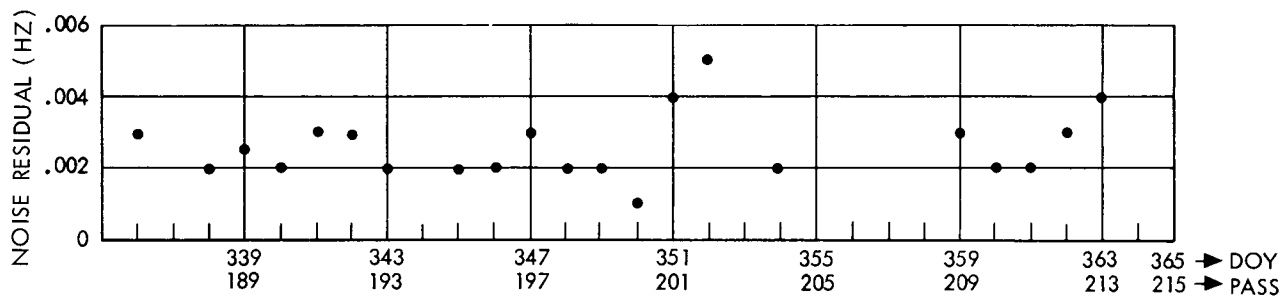


Fig. 36. DSS 12 average residual plots for December 1971

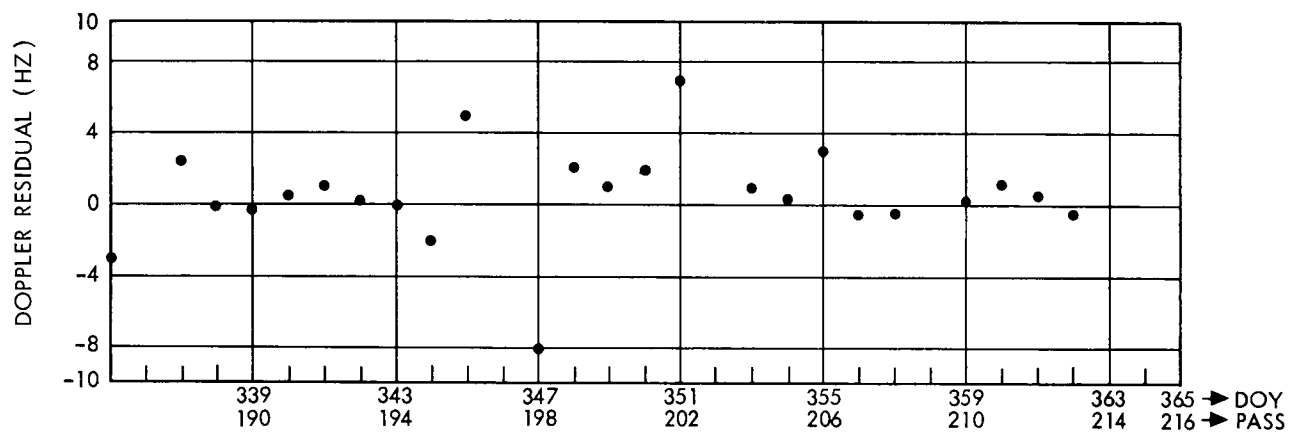


PLOTS OF AVERAGE TWO-WAY DOPPLER RESIDUALS PER PASS

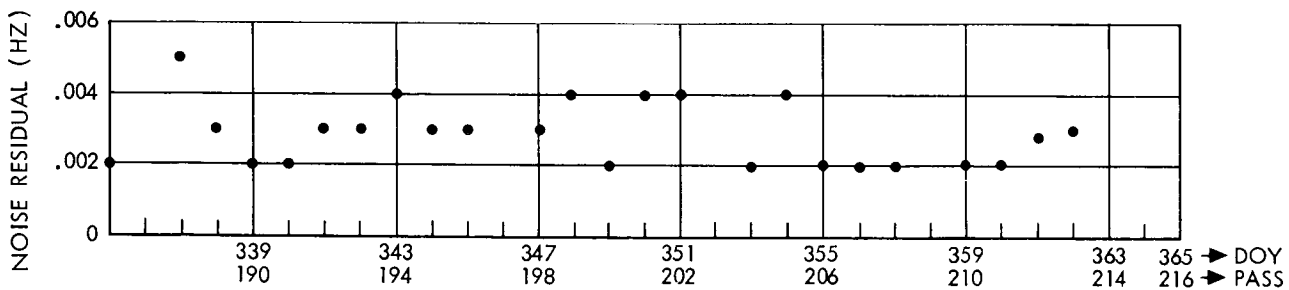


PLOTS OF AVERAGE DOPPLER NOISE PER PASS

Fig. 37. DSS 41 average residual plots for December 1971



PLOTS OF AVERAGE TWO-WAY DOPPLER RESIDUALS PER PASS



PLOTS OF AVERAGE DOPPLER NOISE PER PASS

Fig. 38. DSS 62 average residual plots for December 1971

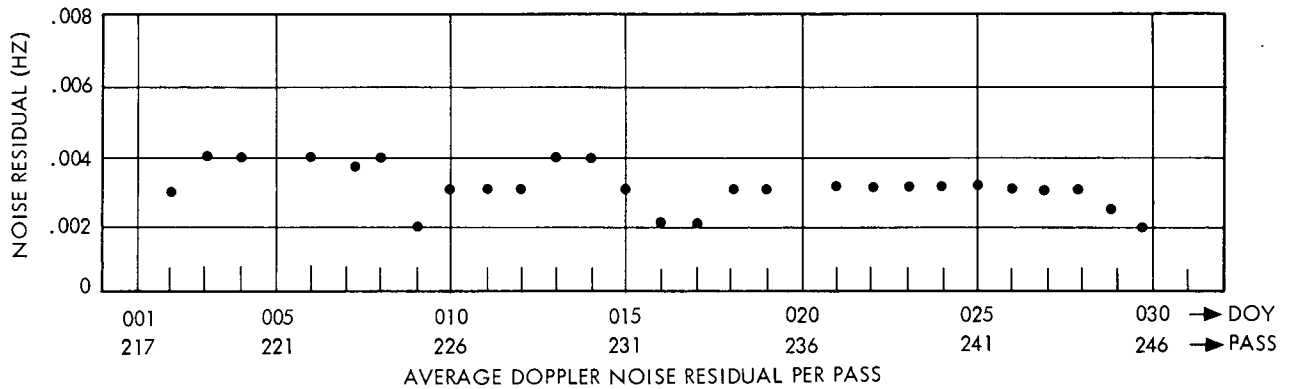
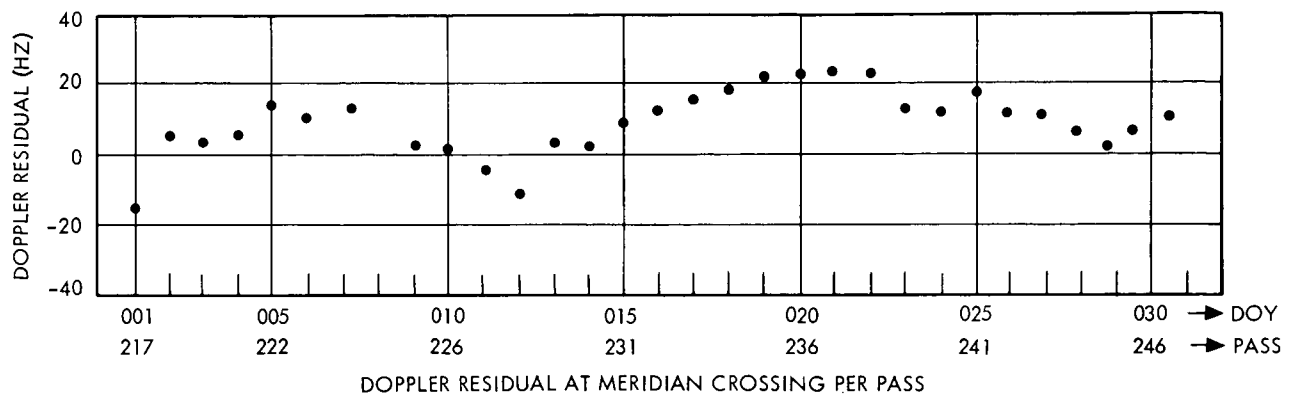


Fig. 39. Average DSS 12 residual plots for January 1972

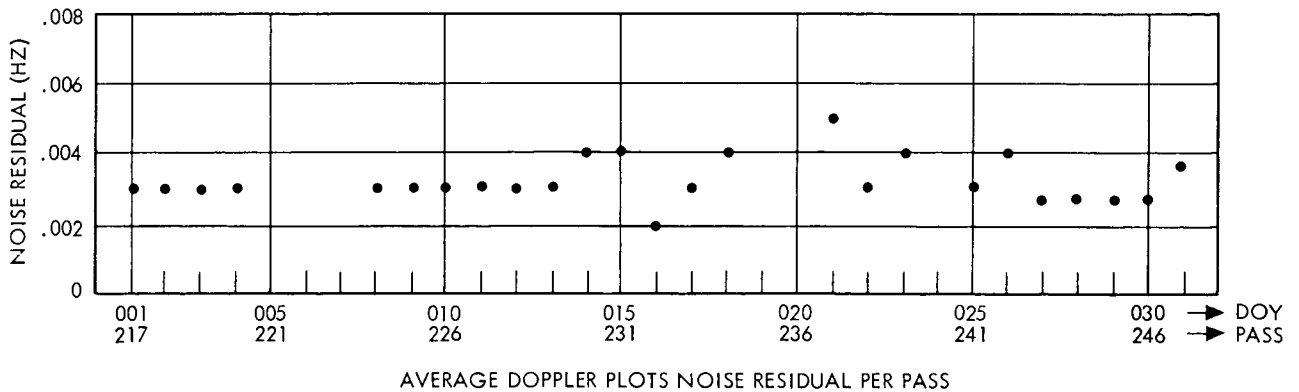
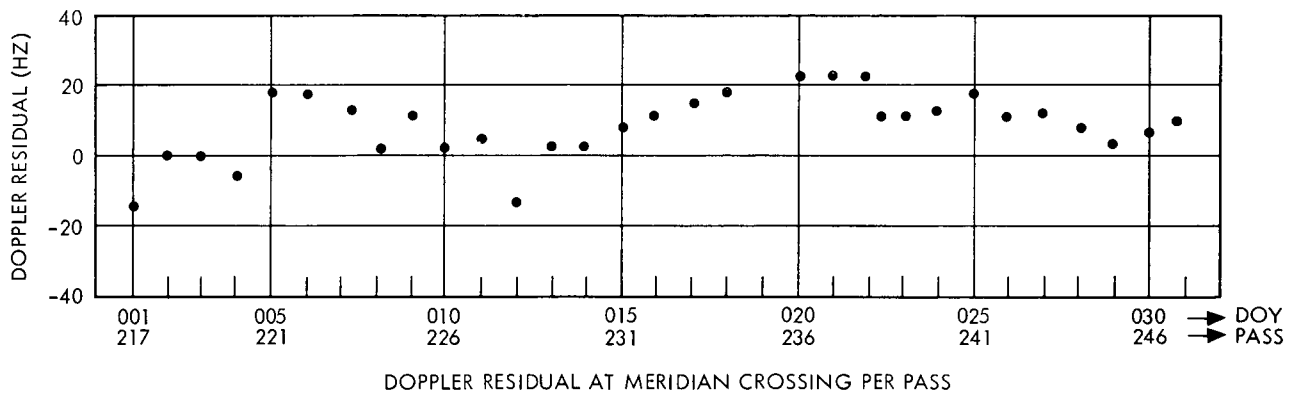


Fig. 40. Average DSS 14 residual plots for January 1972

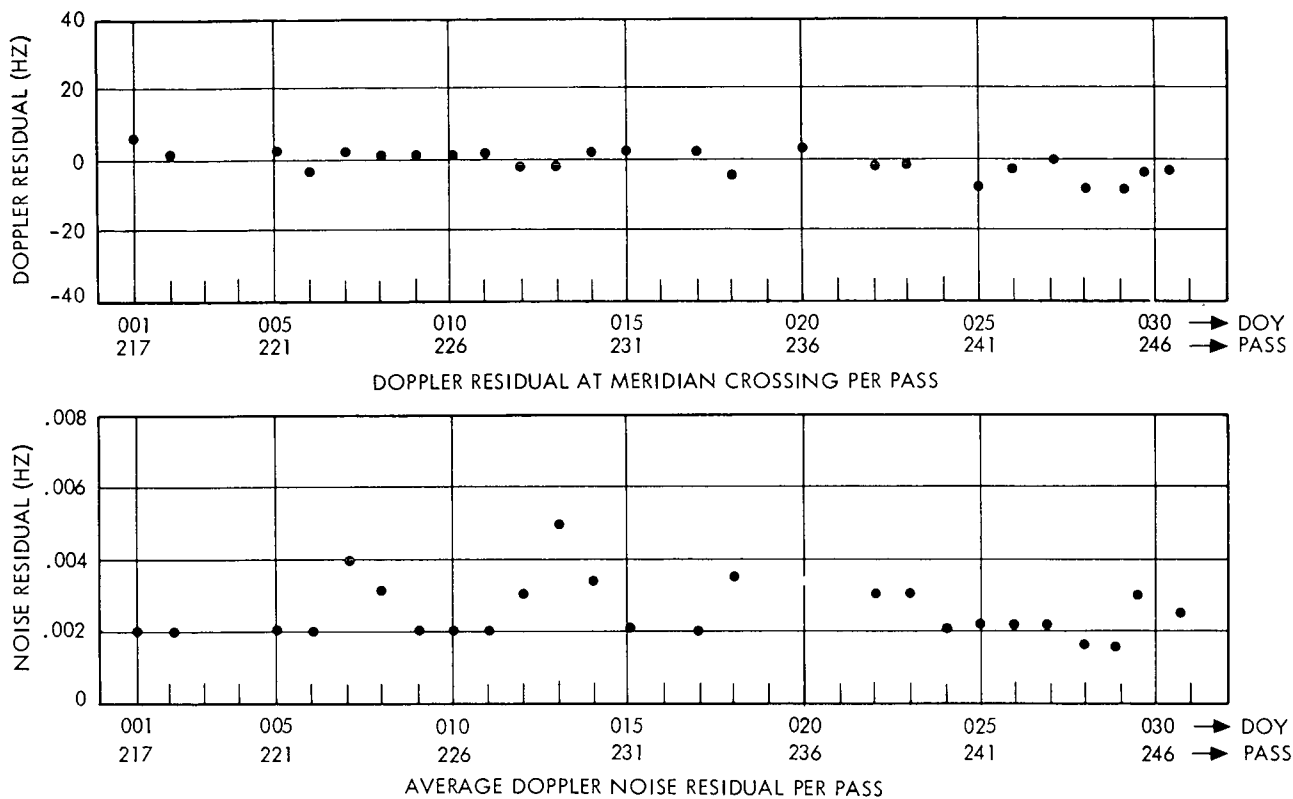


Fig. 41. Average DSS 41 residual plots for January 1972

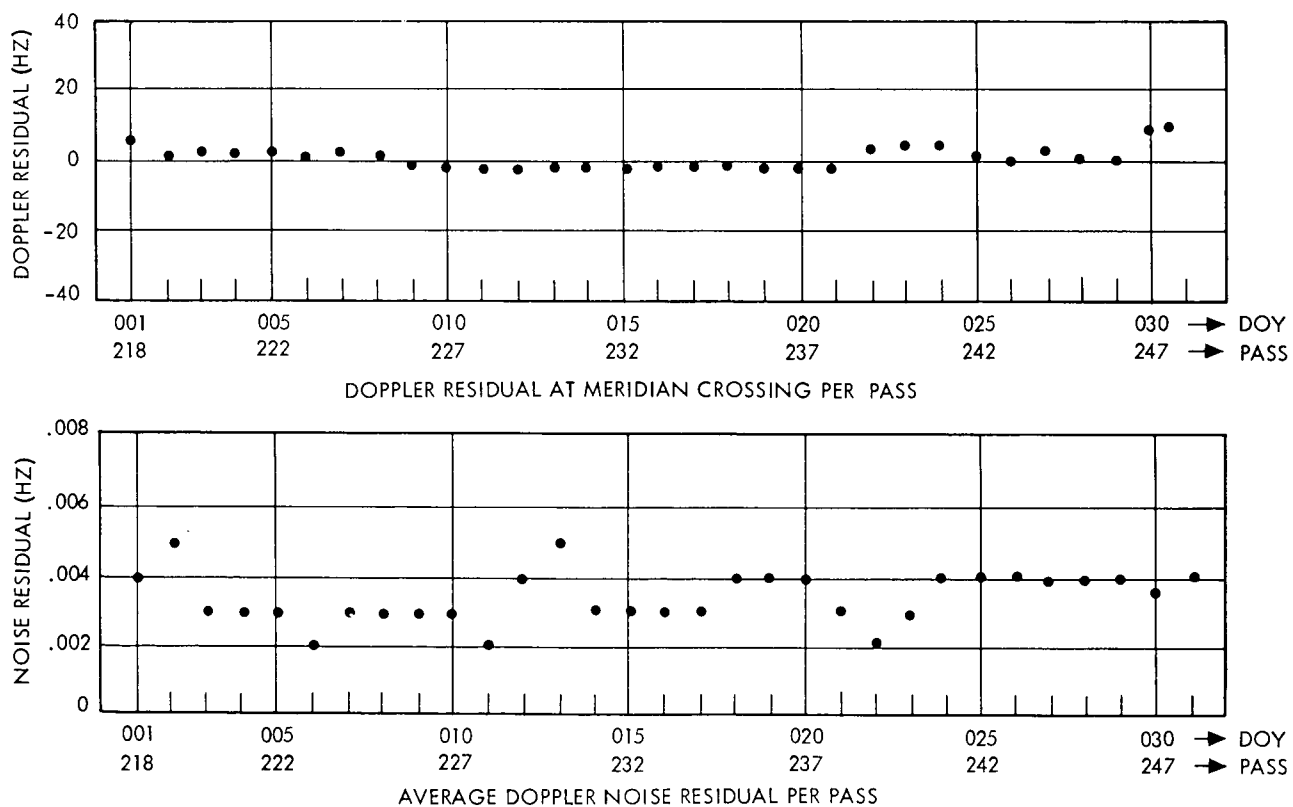
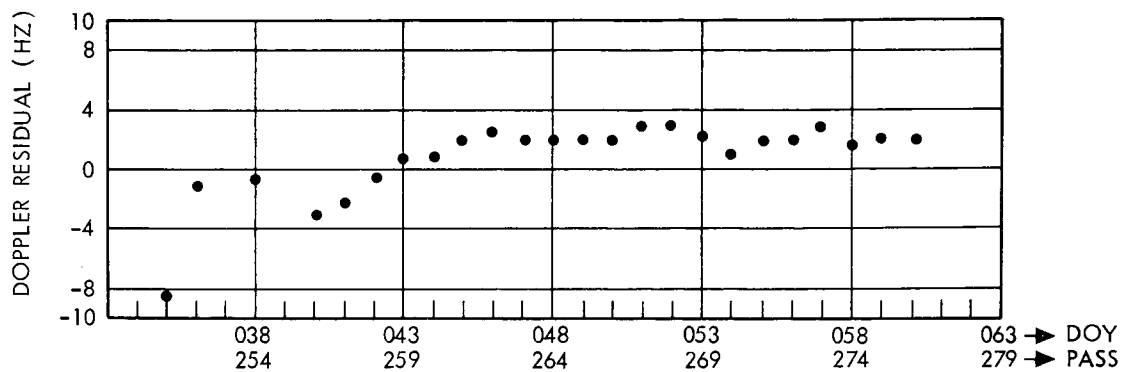
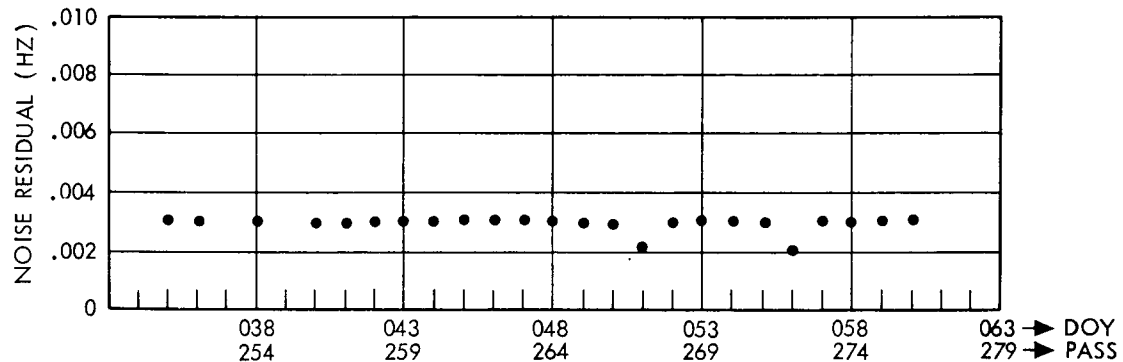


Fig. 42. Average DSS 62 residual plots for January 1972

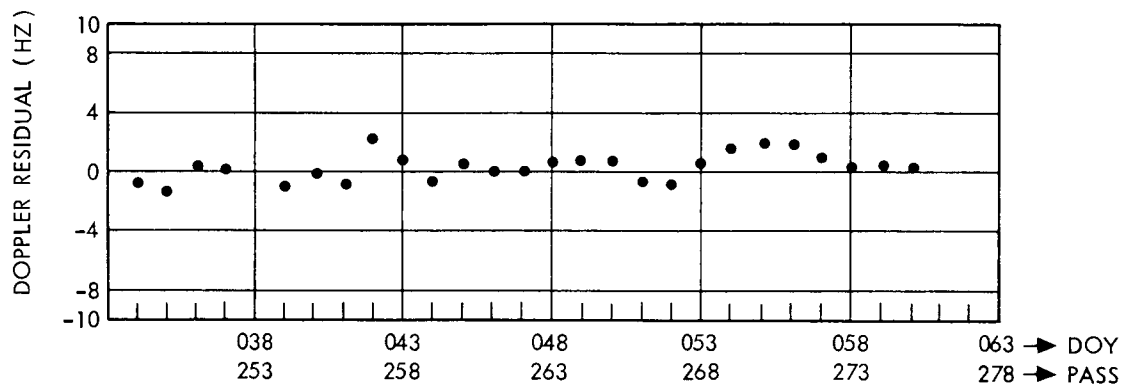


PLOTS OF AVERAGE TWO-WAY DOPPLER RESIDUALS PER PASS

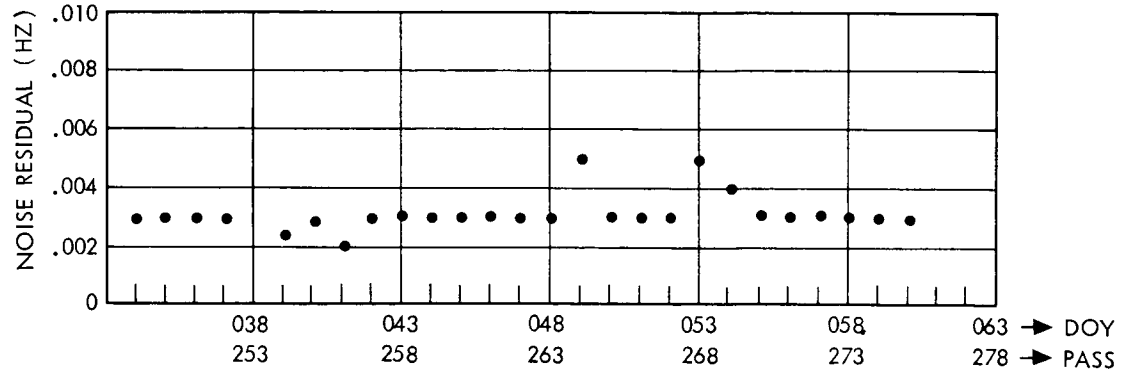


PLOTS OF AVERAGE DOPPLER NOISE PER PASS

Fig. 43. Average DSS 12 residual plots for February 1972

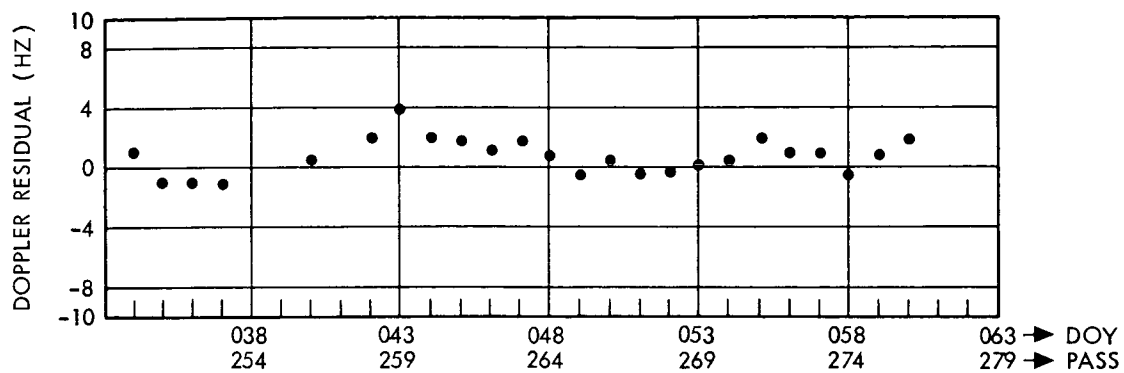


PLOTS OF AVERAGE TWO-WAY DOPPLER RESIDUALS PER PASS

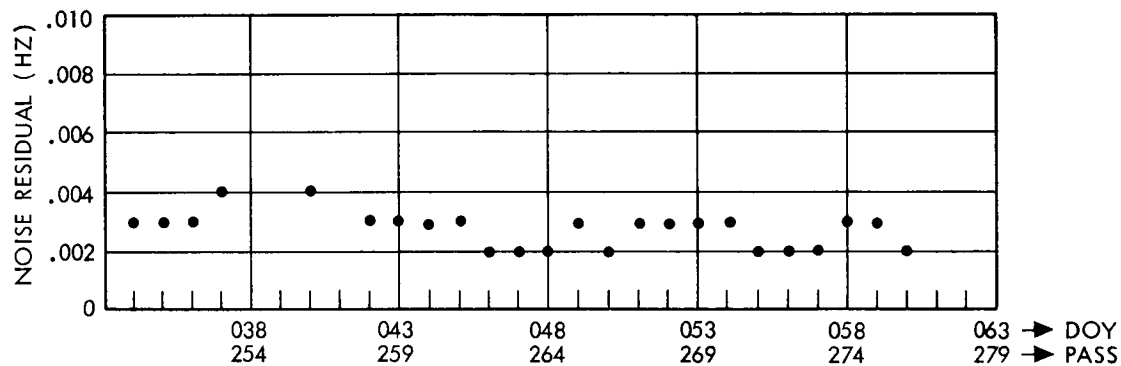


PLOTS OF AVERAGE DOPPLER NOISE PER PASS

Fig. 44. Average DSS 41 residual plots for February 1972

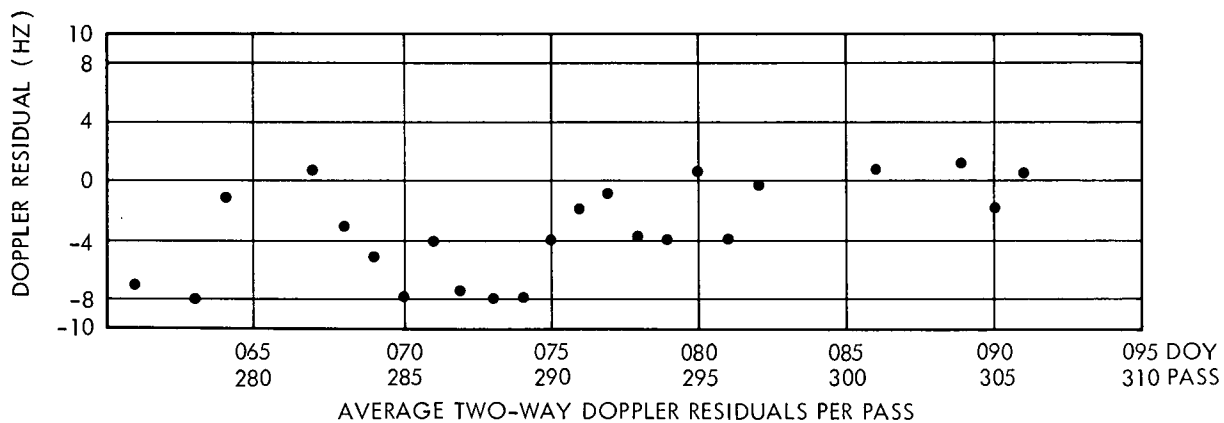


PLOTS OF AVERAGE TWO-WAY DOPPLER RESIDUALS PER PASS

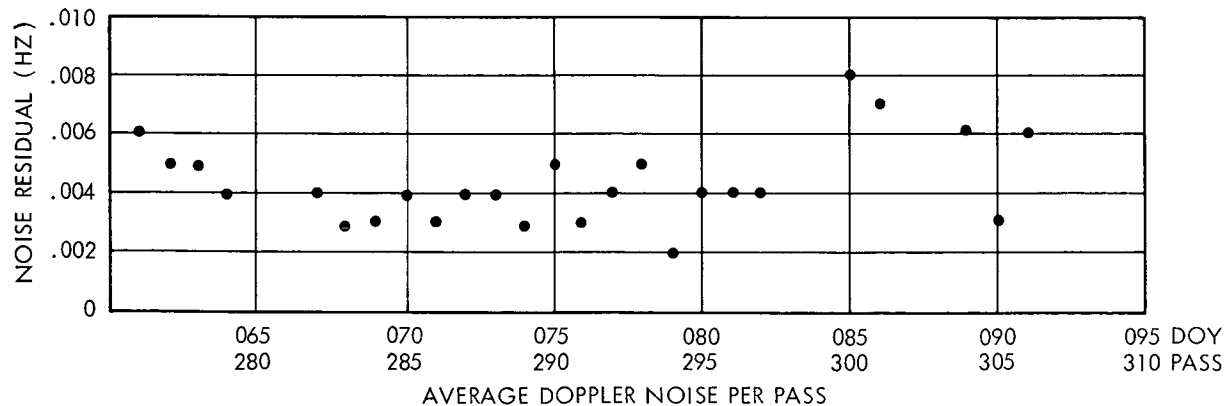


PLOTS OF AVERAGE DOPPLER NOISE PER PASS

Fig. 45. Average DSS 62 residual plots for February 1972



AVERAGE TWO-WAY DOPPLER RESIDUALS PER PASS



AVERAGE DOPPLER NOISE PER PASS

Fig. 46. Average DSS 14 residual plots for March 1972

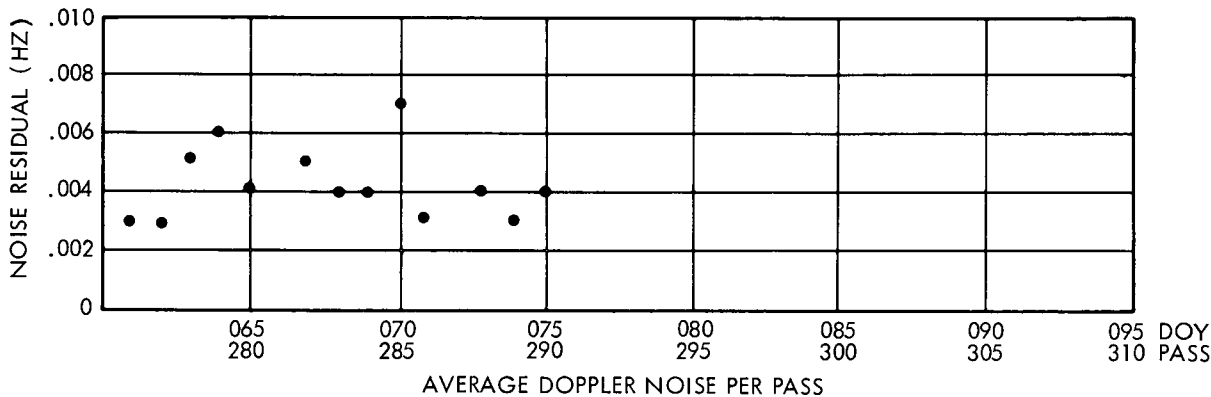
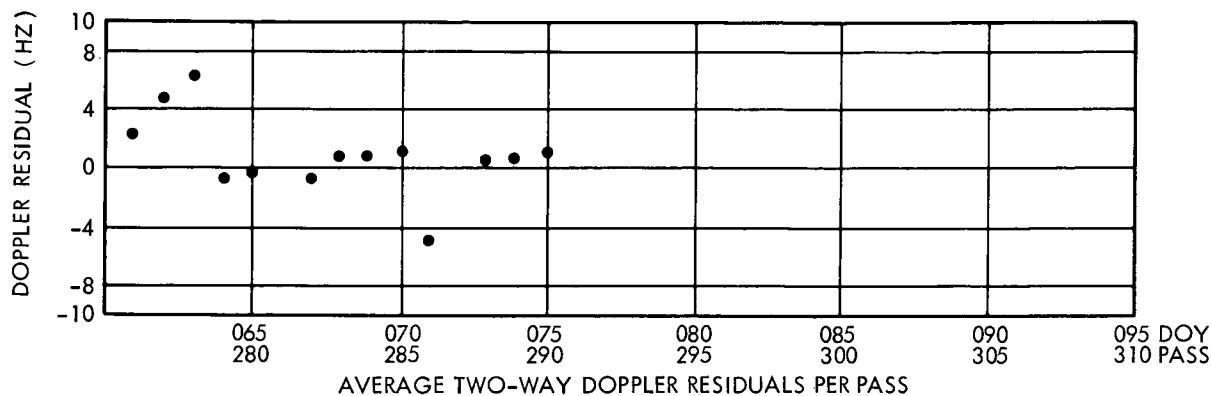


Fig. 47. Average DSS 41 residual plots for March 1972

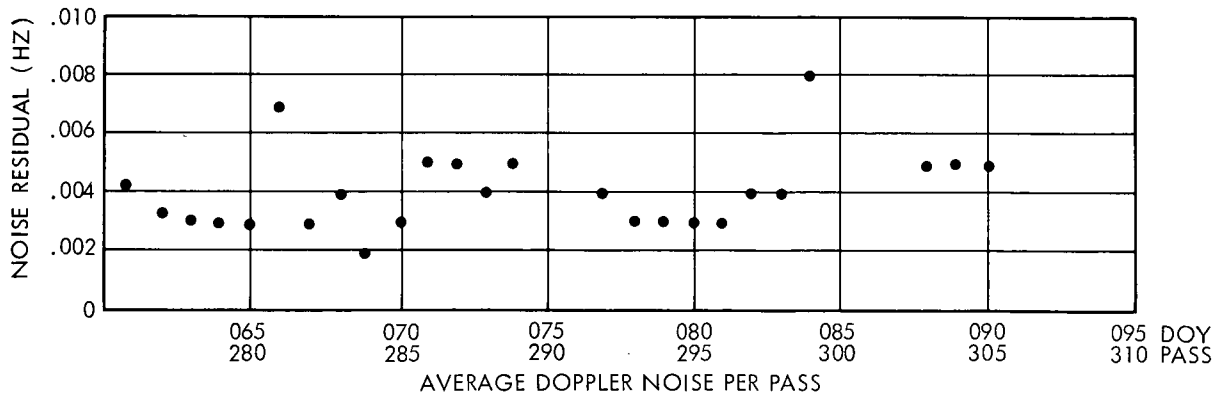
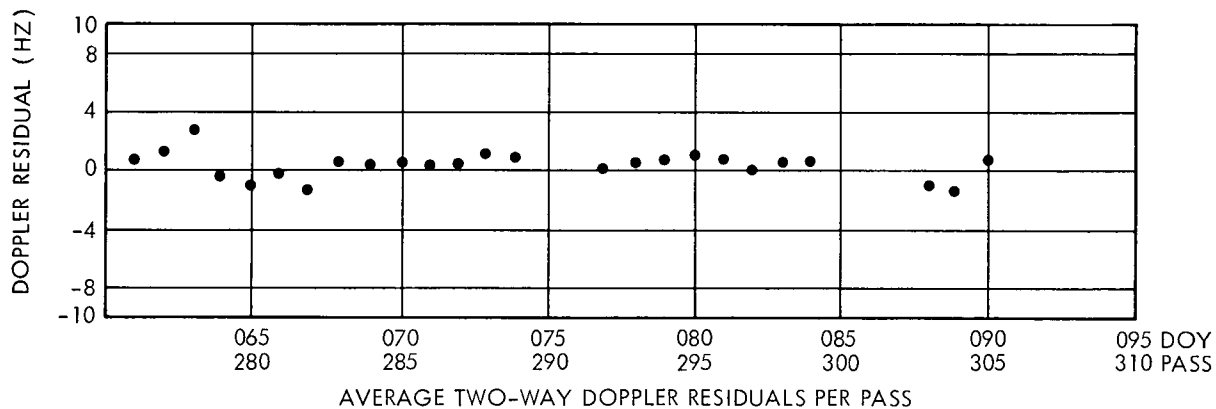


Fig. 48. Average DSS 62 residual plots for March 1972

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APPENDIX DETAILS OF PASS CHRONOLOGY*

PASS	DATE	TIME	DAY	TIME
PASS 0168	NOV 14, 1971	NOV 14, 1971	DAY 318	318
DSS 41	A.O.S. 318/0334	L.O.S. 318/1611	COMMANDS 25	RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK: 0700-1330Z
 CMDS-0707-1040Z TO 1043-1102Z
 0739-0743Z-DIS RELOADED-NO DR
 0254Z-RECALL RESPONSE DATA BLOCKS HANGING UP AT STA. RELOAD
 OF CMD PORTION OF TCP-DR C-048
 TFR 41/TDH/A58645 TDH VCO COUNTER: INCORRECT COUNTS.
 SCIENCE BIT RATE FOR PASS WAS 33 1/3BPS
 IN TAPE TENSION ARMS. TFR/41/DIS/A58647 DIS HUNG UP:
 WATCHDOG TIMER ALARM. DR.C-048 NAT COM.
 ALL COMMAND MESSAGES OUTPUT FROM STATION HANGING UP IN
 OUTPUT BUFFER

PASS	DATE	TIME	DAY	TIME
PASS 0168	NOV 14, 1971	NOV 14, 1971	DAY 318	318
DSS 42	A.O.S. 318/0816	L.O.S. 318/1503	COMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

BDA PREDIC 20.0 ACTUAL 18.6 SCIENCE BIT RATE AT 50 BPS
 AOS LATE DUE TO NO PRDX
 OCCULTATION 1328Z RE-ACQ 1405Z

PASS	DATE	TIME	DAY	TIME
PASS 0169	NOV 14, 1971	NOV 15, 1971	DAY 318	319
DSS 62	A.O.S. 318/1410	L.O.S. 319/0013	COMMANDS 18	RANGING NIL

DEVIATIONS OR ANOMALIES

142646-220000Z-2-WAY 18 CMDS
 NOTE: ANT OFF 42 IN POINTING ANGLE (HA) DR1548
 NOTE: WHEN PB MODE STARTED SSA GOT FALSE LOCK AND TCP HAD
 TO BE RE-INITIALIZED.
 BDA PREDIC 7.1 ACTUAL 6.8 SCIENCE BIT RATE AT 50 BPS

PASS	DATE	TIME	DAY	TIME
PASS 0169	NOV 14, 1971	NOV 15, 1971	DAY 318	319
DSS 12	A.O.S. 318/2120	L.O.S. 319/0755	COMMANDS 181	RANGING -NIL

DEVIATIONS OR ANOMALIES

* INVALID, RCVR IN MGC UNTIL SHORTLY BEFORE PREDICTED TEX
 2-WAY TRK: 2213-0202Z AND 0311-0714Z-CMD XMIT: 2300-0142Z
 0727-0732Z, 360 DOWN FOR WARM RESTART-DR2368 AND 0315-0648Z
 STANDARD PLAYBACK PROCEDURE AT 8.1 AND 16.2 KBPS

* Extracted from monthly DSN Operations Reports for Mariner Mars 1971 Project. For more detailed information, refer to the pass summaries in the individual monthly DSN Operations Reports for this period.

PASS 0169 NOV 14,1971 NOV 15,1971 DAY 318 319

DSS 14 A.O.S. 318/2145 L.O.S. 319/0703 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

DIS "RED" AT DSS 14
ENGINEERING DATA RECEIVED FROM STATION 12: STANDARD PLAYBACK

PASS 0169 NOV 15,1971 NOV 15,1971 DAY 319 319

DSS 41 A.O.S. 319/0655 L.O.S. 319/1611 CCMMANDS 20 RANGING -NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK-0715-1438Z
CMDS-0725-1420Z
BDA PREDIC 19.9 ACTUAL 18.7 SCIENCE DATA AT 50 BPS

PASS 0170 NOV 15,1971 NOV 15,1971 DAY 319 319

DSS 62 A.O.S. 319/1402 L.O.S. 319/2400 COMMANDS 17 RANGING -NIL

DEVIATIONS OR ANOMALIES

** SEE TLM LOG IN PASS FOLDER
CMDNG-1512-2225Z
1745-1802Z-DIS DOWN-RECONFIG. APS TC TAPE DRIVE-RELOADED
DIS-NO DR
OPR. ERROR ON MISINTERPRETATION OF SYNLO PREDICTS-DR1553
2-WAY TRK: 1509-2230Z
BDA PREDIC 19.1 ACTUAL 18.5 SCIENCE BIT RATE AT 50 BPS

PASS 0170 NOV 15,1971 NOV 16,1971 DAY 319 320

DSS 12 A.O.S. 319/2110 L.O.S. 320/0753 COMMANDS 18 RANGING -NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK: 0401-0745Z CMC TIME: 0412-0732Z
0115-0126Z, 360 DOWN-WARM IPL REQ, DR2444
0212-0225Z, 360 DOWN-DR2447
0639-0702Z, 360 DOWN-1052'S LOCKED-OUT, IPL REQ, DR2448
STANDARD PLAYBACK PROCEDURE

PASS 0170 NOV 16,1971 NOV 16,1971 DAY 320 320

DSS 41 A.O.S. 320/0648 L.O.S. 320/1610 COMMANDS 280 RANGING -NIL

DEVIATIONS OR ANOMALIES

1510-1540Z, 360/75 DOWN-SYSTEM RELOAD OF NEW VERSION 11.4-
NO DR-SCHEDULED
DR 1558 TFR 41/RCV/A56651. EXCITER LOOP BECAME UNSTABLE AT
140400 UNTIL TXR OFF AT 151059. DR1556 TRAKON ORDERED
TRANSMITTER OFF IN ERROR. TIME OFF 084741 CN 084814.
BDA PREDIC 19.7 ACTUAL 18.5 SCIENCE BIT RATE 50 BPS

PASS 0170 NOV 16,1971 NOV 17,1971 DAY 320 321

 DSS 14 A.O.S. 320/2139 L.O.S. 321/0737 COMMANDS 0 RANGING -NIL
 DEVIATIONS OR ANOMALIES

DIS LOG TAPE RED-UNABLE TO ENABLE-NO DR
 2301Z-DIS LOG TAPE ENABLED
 0500-0509Z, 360 DOWN, LOCKED-OUT OF 1052 CONSOLE, DR2455
 ENGINEERING DATA RECEIVED FROM STATION 12:STANDARD PLAYBACK

PASS 0170 NOV 16,1971 NOV 17,1971 DAY 320 321

 DSS 14 A.O.S. 320/2144 L.O.S. 321/0736 CCMANDS 21 RANGING -NIL
 DEVIATIONS OR ANOMALIES

DIS LOG TAPE RED-NOT ABLE TO ENABLE-NO DR
 0115-0126Z, 360 DOWN-WARM IPL REQ-DR2444
 0212-0225Z, 360 DOWN-COLD IPL REQ-DR2447
 0639-0702Z, 360 DOWN, 1052'S LOCKED-OUT, IPL REQ, DR2448
 2-WAY TRK: 2243-0215Z. CMD TIME: 2310-0158Z
 BDA PREDIC 7.3 ACTUAL 6.6 SCIENCE BIT RATE 50 BPS

PASS 0171 NOV 16,1971 NOV 17,1971 DAY 320 321

 DSS 62 A.O.S. 320/1401 L.O.S. 321/0001 COMMANDS 281 RANGING -NIL
 DEVIATIONS OR ANOMALIES

BDA PREDIC 19.1 ACTUAL 18.2 SCIENCE DATA AT 8.1 KBPS
 1559-2314Z 2-WAY, CMD TIMES: 1602-2227Z
 1510-1540Z, 360/75 DOWN FOR SYSTEM RELOAD OF NEW VERSION
 (11.4)-NO DR
 1850-1859Z, 360/75 DOWN-DR2461
 1923Z SDA 1 BAD DATA CONDITIONER-SWITCHED TO BACK-UP ON
 B COMPUTER. DR1560

PASS 0171 NOV 16,1971 NOV 16,1971 DAY 320 320

 DSS 51 A.O.S. 320/1457 L.O.S. 320/2100 COMMANDS 0 RANGING -NIL
 DEVIATIONS OR ANOMALIES

*DD.BIAS 3W.-1.00
 DR T-35 ENGR SNR -1.7DB BELOW PRDX
 1500Z DIS DOWN-RFO UNKNOWN-1WAY TRK 1457-2100Z
 1510-1540Z 360/75 DOWN-SYSTEM RELOAD OF NEW VERSION 11.4-NO
 DR-SCHEDULED
 1812Z-DIS ON LINE-RFO-AFTER INSTALLATION OF MODIFICATION,
 CABLE W144, AS SPECIFIED IN ECO 71084, STATION WAS UNABLE
 TO RECORD ON MAG TAPE DRIVE. SUBJECT MODIFICATION REMOVED,
 CHECKED, AND RE-INSTALLED TO SPECIFICATIONS OF ECO 71084.
 PROBLEM CLEARED AFTER 2ND INSALLATION. DR1559 REFERS
 1850-1859Z, 360/75 DOWN-PRO DSK PACKS SAT-SWAPPED TO
 BACK-UP-DR2461

PASS 0171 NOV 16,1971 NOV 17,1971 DAY 320 321

 DSS 12 A.O.S. 320/2109 L.O.S. 321/0753 CCMANDS 32 RANGING -MU
 DEVIATIONS OR ANOMALIES

2-WAY TRK: 2314-0308Z TO 0356-0710Z CMD TIMES: 0034-0530Z
 2227-DIS RELOADED-STA. UNABLE TO ACCESS CRT-NO DR
 0350-DIS PROGRAM HUNG, DIS REINITIALIZED-NO DR
 0500-0509Z, 360 DOWN, 1052 CONSOLE LOCKED OUT, DR2455
 SCIENCE BIT RATE 8.1 KBPS:STANDARD PLAYBACK PROCEDURE

PASS 0171	NOV 17,1971	NOV 17,1971	DAY 321	321
DSS 41	A.O.S. 321/0648	L.O.S. 321/1608	COMMANDS 21	RANGING -NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK-0700-1538Z
 CMDS 0706-1449Z
 1053-1059Z-360/75 DOWN-DR2467 REFERS
 2-WAY TRK: 1744-2120Z CMDS XMTD 1820-2006Z
 1625-1630Z 360/75 DOWN-COLD IPL SKED SOFTWARE CHANGE VER
 11.4-NO DR
 2329-2342Z 360/75 DOWN CANCELLED R/T JOB WITH DUMP-WARM RE-
 START AND IPL DR2464
 8.1 KBPS AND 16.2 KBPS

PASS 0172	NOV 17,1971	NOV 18,1971	DAY 321	322
DSS 12	A.O.S. 321/2104	L.O.S. 322/0757	COMMANDS 147	RANGING -NIL

DEVIATIONS OR ANOMALIES

2122Z-TCP-A RELOADED-COULD NOT CONTROL MAG TAPES
 2329-2342Z, 360/75 DOWN, CANX R/T JOB WITH DUMP-WARM IPL
 DR24
 0111-0127Z, 360 DOWN, COLD IPL, DR2465
 0309-0334Z, 360 DOWN, RESTORE DISC PACKS, SYSTEM UPDATE;
 NO DR
 SCIENCE BIT RATE 8.1 KBPS:STANDARD PLAYBACK PROCEDURE
 * LAST READING UNAVAILABLE, DUE TO 360 OUTAGE AT LOS
 2-WAY TRK 2133-0305Z AND 0350-0757Z CMD TIMES: 2135-0243 AND
 0645-0730Z

PASS 0172	NOV 18,1971	NOV 18,1971	DAY 322	322
DSS 41	A.O.S. 322/0648	L.O.S. 322/1606	COMMANDS 112	RANGING -NIL

DEVIATIONS OR ANOMALIES

0752-0800Z 360/75 DOWN-RTMFP PROBS. RESTART DR2466

PASS 0172	NOV 18,1971	NOV 19,1971	DAY 322	323
DSS 14	A.O.S. 322/2137	L.O.S. 323/0737	COMMANDS 0	RANGING -NIL

DEVIATIONS OR ANOMALIES

2329-2342, 360 DOWN, CANX R/T JOB WITH DUMP, WARM IPL, DR2464
 0111-0127, 360 DOWN, IPL "COLD" DR2465
 DIS RELOADED DURING OCCULTATION (0305Z)
 0309-0334Z, 360 DOWN, RESTORE DISK PACKS, SYSTEM UPDATE;
 NO DR
 0752-0800Z, 360 DOWN-RTMFP PROBLEMS-RESTART, DR2466
 ENGINEERING DATA RECEIVED FROM STATION 12: STANDARD PLAYBACK
 BDA PREDIC 7.3 ACTUAL 7.3 SCIENCE BIT RATE AT 8.1 KBPS

PASS 0173	NOV 18,1971	NOV 19,1971	DAY 322	323
DSS 62	A.O.S. 322/1355	L.O.S. 323/0001	COMMANDS 15	RANGING -NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK: 1555-2120Z CMDS XMTD 1558-1820Z
 1840-1856Z 360/75 DOWN-COLD START DR2469

PASS 0173	NOV 18,1971	NOV 19,1971	DAY 322	323
DSS 12	A.O.S. 322/2136	L.O.S. 323/0732	COMMANDS 68	RANGING -NIL

DEVIATIONS OR ANOMALIES

0402-0415Z, 360/75 DOWN, RE-IPL, DUE TO 2 STREAMS 1 SEC TDH
 DATA BACKLOG SYSTEM-DR2466
 0501-0506Z, 360/75 DOWN, TAKEN DOWN-RESTART, DUE TO BACKLOG
 JOB NOT FUNCTIONING PROPERLY, NO DR
 2-WAY TRK: 2134Z TO 0302Z AND 0351-0730Z
 CMD TIMES: 2153-0225Z + 0358-0719Z
 CMD TIMES: 2153-0225Z AND 0358-0719Z

PASS 0173	NOV 18,1971	NOV 19,1971	DAY 322	323
DSS 14	A.O.S. 322/2136	L.O.S. 323/0732	COMMANDS 0	RANGING -NIL

DEVIATIONS OR ANOMALIES

0402-0415Z, 360 DOWN, RE-IPL, DUE TO 2 STREAMS 1 SEC TDH
 DATA BACKLOG SYSTEM, DR2466
 0501-0506, 360 DOWN, TAKEN DOWN-RESTART, DUE BACKGROUND JOB
 NOT FUNCTIONING PROPERLY-NO DR

PASS 0173	NOV 19,1971	NOV 19,1971	DAY 323	323
DSS 41	A.O.S. 323/0643	L.O.S. 323/1604	COMMANDS 32	RANGING NIL

DEVIATIONS OR ANOMALIES

0744Z-0845Z,0918Z-0958Z,1027Z-1110Z,1134Z-1227Z,1240Z-1503Z 2-
 WAY 1232Z-1248Z 360/75 DOWN COLD IPL DR-2472.
 1259Z-1307Z TCP DOWN,TAKEN DOWN FOR RELOADNO DR.

PASS 0174	NOV 19,1971	NOV 19,1971	DAY 323	323
DSS 62	A.O.S. 323/1353	L.O.S. 323/2400	COMMANDS 59	RANGING -NIL

DEVIATIONS OR ANOMALIES

TCP-A
 ACTUAL-18.3
 PREDIC-18.9
 DIFFER -0.5
 2-WAY TRK: 1549-2120Z CMDS XMTD 1556-1857Z

PASS 0174	NOV 19,1971	NOV 20,1971	DAY 323	324
DSS 12	A.O.S. 323/2059	L.O.S. 324/0750	COMMANDS 3	RANGING -MU

DEVIATIONS OR ANOMALIES

2-WAY TRK: 2120-0700Z CMDS XMTD 2135-0655Z
 2258-2306Z-3100 DOWN-DTV'S STOPPED UPDATING-DR2476
 TCP-A RELOADED DURING OCCULTATION

PASS 0174	NOV 19,1971	NOV 20,1971	DAY 323 324
DSS 14	A.O.S. 323/2132	L.O.S. 324/0730	COMMANDS 0 RANGING -NIL
DEVIATIONS OR ANOMALIES			
2258-2306Z 3100 DOWN-DTV'S STOPPED UPDATING-DR2476 3-WAY TRK ONLY			

PASS 0174	NOV 20,1971	NOV 20,1971	DAY 324 324
DSS 41	A.O.S. 324/0636	L.O.S. 324/1603	COMMANDS 3 RANGING -NIL
DEVIATIONS OR ANOMALIES			
0714-1014Z, 1036Z-1125Z, 1139-1146Z, 1344-1409Z, 1410-1500Z 2-WAY TRK			

PASS 0175	NOV 20,1971	NOV 20,1971	DAY 324 324
DSS 62	A.O.S. 324/1350	L.O.S. 324/2158	COMMANDS 149 RANGING -NIL
DEVIATIONS OR ANOMALIES			
1732-2026Z 2-WAY			

PASS 0175	NOV 20,1971	NOV 21,1971	DAY 324 325
DSS 12	A.O.S. 324/2058	L.O.S. 325/0754	COMMANDS 5 RANGING MU
DEVIATIONS OR ANOMALIES			
0644-0657Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RE IPL DR2479 2-WAY TRK-2120-0700Z-CMDS XMTD-2140-0655Z			

PASS 0175	NOV 20,1971	NOV 21,1971	DAY 324 325
DSS 14	A.O.S. 324/2140	L.O.S. 325/0728	COMMANDS 0 RANGING -NIL
DEVIATIONS OR ANOMALIES			
0644-0657Z 360/75 DOWN, LOCKED OUT OF SYSTEM-RE-IPL DR2479 3-WAY TRK-NO CMDS			

PASS 0175	NOV 21,1971	NOV 21,1971	DAY 325 325
DSS 41	A.O.S. 325/0621	L.O.S. 325/1600	COMMANDS 7 RANGING NIL
DEVIATIONS OR ANOMALIES			
2-WAY TRK-0714-1454Z 7 CMDS XMTD 0751-1454Z 0644-0657Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RE-IPL-DR2479 0810-0820Z-360/75 DOWN-STRING SWAP-B TO A-NO DR 0925Z-DIS RELOADED 0929-0933Z-360/75 DOWN-SWAP MSD PACKS FROM B STRING-RESTART- DR2479			

PASS 0176	NOV 21,1971	NOV 22,1971	DAY 325 326
DSS 62	A.O.S. 325/1348	L.O.S. 326/0001	COMMANDS 624 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-AS SNR
 ACTUAL-17.7
 PREDIC-18.4
 DIFFER -0.7
 1942-1954Z 3100 DOWN-360/75 TAKEN DOWN TO RE ESTABLISH
 3100/360 INTERFACE-IPL DR2393/2435
 2145-2155Z DTV'S HUNG UP, DUE TO 3100 PROBLEMS DR2393/2435
 REFER.
 2233-2259Z 360/75A TAKEN DOWN FOR UNSKED MAINT. DUE TO MEMORY
 FAILURES. SWAPPED TO B
 2028Z LOST HSDL FROM GODDARD TO DSS 62 DR4037

PASS 0176	NOV 21,1971	NOV 22,1971	DAY 325 326
DSS 12	A.O.S. 325/2056	L.O.S. 326/0748	COMMANDS 14 RANGING -MU

DEVIATIONS OR ANOMALIES

2145-2155Z DTV'S HUNG DUE TO 3100 PROBLEM DR2393/2435 REFERS
 2233-2259Z 360/75 TAKEN DOWN FOR UNSKED MAINT. DUE TO MEMORY
 FAILURES SWAPPED TO "B" SYSTEM DR2484
 2-WAY TRK-2330-0740Z CMDS 2333-0735Z

PASS 0176	NOV 21,1971	NOV 22,1971	DAY 325 326
DSS 14	A.O.S. 325/2127	L.O.S. 326/0732	COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

RX 2 AGC TCP-B SNR
 ACTUAL- 141.6 5.9
 PREDIC- 140.9 6.4
 DIFFER -0.7 -0.5
 2127Z AQS-MON DATA HAD S/C I.D. 85 VICE 75 RELOAD REQ.
 COMP 2140Z NO DR
 2233Z 360/75 TAKEN DOWN FOR UNSKED MAINT, DUE TO MEMORY FAIL-
 URES SWAPPED TO 22+03Z "B" SYSTEM DR2484
 3-WAY TRK ONLY NO CMDS

PASS 0176	NOV 22,1971	NOV 22,1971	DAY 326 326
DSS 41	A.O.S. 326/0648	L.O.S. 326/1558	COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

CMDS ENTERED IN MANUAL MODE DUE TO OUTAGE DR2488
 1214-1405Z 360/75 DOWN-2260'S LOCKED OUT OF SYSTEM-WARM IPL
 REQ-DR2487
 1350-1405Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RE IPL REQ-DR2488
 1437-1453Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RE IPL REQ-DR2489
 1502-1553Z DTV'S HALTED REF DR2490
 1542-1553Z 360/75 DOWN-ERROR ON MDR ABENDED DR2490
 0834-1435Z 2-WAY

PASS 0176	NOV 22,1971	NOV 22,1971	DAY 326	326
DSS 42	A.O.S. 326/0758	L.O.S. 326/1446	COMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

OR T-37 ON D/L RESD -2.5DB PRDX

PASS 0177	NOV 22,1971	NOV 22,1971	DAY 326	326
DSS 62	A.O.S. 326/1345	L.O.S. 326/2400	COMMANDS 4	RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-AS SNR
 ACTUAL- 17.9
 PREDIC- 18.3
 DIFFER -0.4
 2-WAY TRK: 1439-2110 CMDS XMTD
 1350 -1405Z 360/75 DOWN-LOCKED-OUT OF SYSTEM-RE-IPL DR2488
 1437-1453Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RE-IPL DR2489
 1502-1553Z DTV'S NOT UPDATING-REF DR2490
 1542-1553Z 360/75 DOWN-ERROR ON ABEND (MDR) DR2490
 2138-2150Z 360/75 TAKEN DOWN TO ATTEMPT RESOLUTION OF PRDX
 DR2496

PASS 0177	NOV 22,1971	NOV 23,1971	DAY 326	327
DSS 12	A.O.S. 326/2053	L.O.S. 327/0747	COMMANDS 14	RANGING MU

DEVIATIONS OR ANOMALIES

2-WAY TRK: 2110-0740Z CMDS XMTD AT 2120-0735Z
 2138-2150Z 360/75 DOWN (TAKEN DOWN) IN ATTEMPT TO RESOLVE
 PRDX PROBLEM-DR2496

PASS 0177	NOV 22,1971	NOV 23,1971	DAY 326	327
DSS 14	A.O.S. 326/2125	L.O.S. 327/0730	COMMANDS 0	RANGING -NIL

DEVIATIONS OR ANOMALIES

RX 2 AGC RANGING ON TCP-B SNR
 ACTUAL-143.1 5.7
 PREDIC-142.0 6.0
 DIFFER -1.1 -0.3
 2154Z STATION SWAPPED FROM TCP "B" TO "A" DUE TO VERY HIGH
 ERROR COUNT
 2215Z SWAPPED BACK TO TCP "B"
 0044-0049Z DIS DOWN TO INITIALIZE SUMMARY BLOCK PER TWX
 0437-0454Z DIS DOWN DUE TO HANG-UP-RELOAD-DR1569
 2138-2150Z 360/75 TAKEN DOWN TO ATTEMPT RESOLUTION OF PRDX
 DR2496

PASS 0177	NOV 23,1971	NOV 23,1971	DAY 327	327
DSS 41	A.O.S. 327/0647	L.O.S. 327/1555	COMMANDS 10	RANGING -NIL

DEVIATIONS OR ANOMALIES

* STA HAD SDA SYMR SET FOR 33 1/3 WHILE SPC WAS 8 1/3
 CHANGED 0805, B/R CHG 33 1/3 0834
 2-WAY TRK-0754-1446Z CMDS-11:57-1408

0647-ADS-S/C ID OF 85 VICE 75-STATION RE-LOADING DIS-NO DR
 0656Z DIS RELOAD COMPLETE
 1500-1508Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RE IPL-DR2506

PASS 0178	NOV 23,1971	NOV 23,1971	DAY 327 327
DSS 62	A.O.S. 327/1347	L.O.S. 327/2400	COMMANDS 3 RANGING -NIL

DEVIATIONS OR ANOMALIES

1500-1508Z-360/75 DOWN-LOCKED OUT OF SYSTEM-RE IPL-DR2506
 2034-2046Z-360/75 DOWN-LOCKED OUT OF SYSTEM-COLD IPL AND
 RESTART REQ-DR2508

PASS 0178	NOV 23,1971	NOV 23,1971	DAY 327 327
DSS 51	A.O.S. 327/1553	L.O.S. 327/2100	COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

2034-2046Z-360/75 DOWN-LOCKED OUT OF SYSTEM-COLD IPL AND
 RESTART REQ DR2508

PASS 0178	NOV 23,1971	NOV 24,1971	DAY 327 328
DSS 12	A.O.S. 327/2052	L.O.S. 328/0746	CCMMANDS 16 RANGING -MU

DEVIATIONS OR ANOMALIES

2-WAY TRK:2103-0740Z CMDS XMTD 2117-0735Z
 2034-2046Z 360/75DOWN-LOCKED OUT OF SYSTEM-COLD IPL AND RE-
 START REQ-DR2508
 2218-2229Z 360/75 DOWN-LOCKED OUT OF SYSTEM-COLD IPL AND RE-
 START REQ-DR25
 2300-2311Z 360/75 TAKEN DOWN FOR SWAP FROM "B" TO "A"-NO DR
 0104-0110Z 360/75 DOWN-PRODISK FUL 100%-IPL REQ-DR2508
 0627-0640Z 360/75 DOWN-CANX REALTIME JOB-LOCKED OUT OF
 SYSTEM-RE IPL-DR2512
 PROCEDURAL ERROR DURING MANUAL CMD SEQUENCE-DR1570

PASS 0178	NOV 23,1971	NOV 24,1971	DAY 327 328
DSS 14	A.O.S. 327/2122	L.O.S. 328/0729	COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

RX 1 AGC	TCP- A SNR
ACTUAL-142.108M	4.8
PREDIC-141.008M	5.8
DIFFER -1.1 DB	-1.0

0627-0640Z 360/75 DOWN, CANX REAL-TIME JOB, LOCKED OUT OF
 SYSTEM-RE IPL DR2512
 ANOMALY TFR NO.--START 034131Z END 042037Z DR1571. REMARKS:
 ANOMALY IN TCP BETA/W-B CIRCUIT DURING 16.2 KB PLAYBACK
 3-WAY TRK ONLY-NO CMDS
 0104-0110Z 360/75 DOWN FOR IPL, DUE TO PRODISK 100% FULL

PASS 0178 NOV 24,1971 NOV 24,1971 DAY 328 328

 DSS 41 A.O.S. 328/0646 L.O.S. 328/1553 COMMANDS 8 RANGING NIL
 DEVIATIONS OR ANOMALIES

2-WAY TRK-1020-1441Z. 8 CMDS XMTD 1131-1443Z
 1445-1501Z 360/75 DOWN-CMD MDR/SDR NOT LOGGING-COLD IPL-
 RESTART-DR C-046 REFERS
 1508-1513Z-360/75 DOWN-ABENDS CANX R/T JOB-REF DR C-046

PASS 0179 NOV 24,1971 NOV 24,1971 DAY 328 328

 DSS 62 A.O.S. 328/1342 L.O.S. 328/2400 COMMANDS 12 RANGING -NIL
 DEVIATIONS OR ANOMALIES

 RX 1 AGC RX 1 AGC TCP- A-ESNR
 ACTUAL-149.8DBM 150.2DBM 8.5
 PREDIC-149.2DBM 149.2DBM 8.5
 DIFFER -0.6 DB -1.0 DB 0.0
 -WAY TRK: 1528-2105Z CMD TIMES: 1545-2055Z
 426Z DIS RELOADED-NOT UPDATING AND STA. LOG TAPE NOT RECOR-
 DING-NO DR
 1445-1501Z-360/75 DOWN-CMD MDR/SDR NOT LOGGING-COLD IPL-
 RESTART-DR C-046 REFERS
 1508-1513Z-360/75 DOWN-ABENDS CANX R/T JOB-REF DR C-046
 1619-1625Z LUST HSLX CARRIER BETWEEN MADRID AND GODDARD
 DR C4072
 2308-2320Z 360 DOWN DUE TO USER OUTPUT PROGRAM PROBS-RESTART
 DR2518

PASS 0179 NOV 24,1971 NOV 25,1971 DAY 328 329

 DSS 12 A.O.S. 328/2049 L.O.S. 329/0745 COMMANDS 13 RANGING -MU
 DEVIATIONS OR ANOMALIES

2-WAY TRK: 2105-0735Z CMDS XMTD-2204-0730Z
 2308-2320Z-360/75 DOWN DUE TO USER OUTPUT PROGRAM PROBLEMS
 RESTART-DR2518

PASS 0179 NOV 24,1971 NOV 25,1971 DAY 328 329

 DSS 14 A.O.S. 328/2119 L.O.S. 329/0729 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

3-WAY TRK-NO CMDS
 ANOMALY START 052904Z END 053313Z-DR1566-REMARKS: OPEN DR
 WRITTEN OF PASS 173 REFERS, TCP B HALTED FOR UNKNOWN REA-
 SON. DATA LOSS WAS COVERED BY ALPHA COMPUTER ODR

PASS 0179 NOV 25,1971 NOV 25,1971 DAY 329 329

 DSS 41 A.O.S. 329/0645 L.O.S. 329/1550 COMMANDS 8 RANGING -NIL
 DEVIATIONS OR ANOMALIES

0750-1429Z 2-WAY 8 CMDS 0746-1437Z
 1042-1055Z 360/75 DOWN-CMD MDR/SDR PROBS-CANX R/T JOB-RESTART
 UNSUCCESSFUL-COLD IPL-DR C-040
 1338-1344Z 360/75 DOWN-NATTRK MFP PROG. PROB.-RESTART-DR0317

REFERS
 1357-1359Z LOST HSDL-NO TRBL FOUND-CLEARED WHILE CHECKING
 1407-1412Z 360/75 DOWN-NATTRK MFP PROG. PROB. IPL REQ.DR0317

PASS 0180	NOV 25,1971	NOV 25,1971	DAY 329	329
DSS 62	A.O.S. 329/1339	L.O.S. 329/2400	COMMANDS 609	RANGING NIL

DEVIATIONS OR ANOMALIES

1338-1344Z, 360 DOWN-NATTRK MFP PROGRAM PROB.-RESTART-DR0317
 1407-1412Z, 360 DOWN-SAME AS NATTRK PROB, IPL DR 0317
 1852-1857Z, 3100 DOWN TO PREVENT BACKLOG AND ALLOW A TASK
 COMPLETION-NO DR
 2-WAY TRK: 1523-2100Z CMD TIMES-1545-2045Z

PASS 0180	NOV 25,1971	NOV 26,1971	DAY 329	330
DSS 12	A.O.S. 329/2046	L.O.S. 330/0745	COMMANDS 26	RANGING NIL

DEVIATIONS OR ANOMALIES

0050-0108Z 360/75 DOWN-CORE ABENDS-DR2517

PASS 0180	NOV 26,1971	NOV 26,1971	DAY 330	330
DSS 41	A.O.S. 330/0645	L.O.S. 330/1548	CCMMANDS 97	RANGING NIL

DEVIATIONS OR ANOMALIES

ACTUAL-17.9
 PREDIC-18.8
 DIFFER -0.9
 2-WAY TRK-0735-1432Z CMDS XMTD 0746-1432Z

PASS 0180	NOV 26,1971	NOV 27,1971	DAY 330	331
DSS 14	A.O.S. 330/2116	L.O.S. 331/0727	CCMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

0050-0108Z 360/75 DOWN-CORE ABENDS, DR2519

PASS 0181	NOV 26,1971	NOV 26,1971	DAY 330	330
DSS 62	A.O.S. 330/1335	L.O.S. 330/2359	COMMANDS 287	RANGING NIL

DEVIATIONS OR ANOMALIES

TCP- AE SNR TCP- AS SNR
 ACTUAL-15.1 -16.0
 PREDIC-15.5 -16.5
 DIFFER -0.4 -0.5
 2-WAY TRK: 1519-2100Z CMD XMIT: 1519-1819Z

PASS 0181 NOV 26,1971 NOV 27,1971 DAY 330 331

 DSS 14 A.O.S. 330/2113 L.O.S. 331/0726 COMMANDS 4 RANGING -NIL

DEVIATIONS OR ANOMALIES

TCP-AE SNR
 ACTUAL-10.2
 PREDIC-10.3
 DIFFER -0.1
 0315-0648Z 2-WAY TRK
 2258-2302Z DIS RELOAD-LOG TAPE NOT WRITING-NO DR
 0143-0159Z 360 DOWN-1052'S LOCKED OUT-IPL REQ-DR2522
 0736-0742Z 360 DOWN-FOR SCHED. SYSTEM SWAP
 013505Z-013552Z ANTENNA DRIVEN OFF POINT-DR01576
 052719Z-052833Z ANTENNA DRIVEN OFF POINT-DR01576

PASS 0181 NOV 27,1971 NOV 27,1971 DAY 331 331

 DSS 41 A.O.S. 331/0644 L.O.S. 331/1545 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

ACTUAL-18.0	-149.1	-16.4	-17.0
PREDIC-19.0	-148.0	-17.3	-18.3
DIFFER -1.0	-1.1	-0.9	-1.3

2-WAY TRK 0749-1428Z CMDS XMTD 0810-1342Z

PASS 0181 NOV 27,1971 NOV 28,1971 DAY 331 332

 DSS 12 A.O.S. 331/2045 L.O.S. 332/0744 COMMANDS 7 RANGING -NIL

DEVIATIONS OR ANOMALIES

2115-0231Z 2-WAY 7 CMDS 2109-0233Z
 0143-0159Z 360/75 DOWN-1052'S LOCKED OUT-IPL REQ -DR2522
 0736-0742Z 360/75 DOWN FOR SYSTEM

PASS 0182 NOV 27,1971 NOV 27,1971 DAY 331 331

 DSS 62 A.O.S. 331/1347 L.O.S. 331/2142 COMMANDS 135 RANGING -NIL

DEVIATIONS OR ANOMALIES

TCP-BE SNR TCP-BE SNR
 ACTUAL- 9.5 5.9
 PREDIC- 9.4 6.3
 DIFFE +0.1 +0.1
 2 WAY TRK: 1515-2110Z
 2142Z STATION RELEASED FROM PASS

PASS 0182 NOV 27,1971 NOV 28,1971 DAY 331 332

 DSS 12 A.O.S. 331/2045 L.O.S. 332/0743 COMMANDS 19 RANGING -MU

DEVIATIONS OR ANOMALIES

2-WAY TRK: 2110-0228Z AND 0312-0728Z
 0327-0336Z, 360 DOWN, TAKEN DOWN DUE TO CORE FRAGMENTATION,
 DR2489
 0730-0738Z, 360 DOWN, TAKEN DOWN FOR SCHED SYSTEM SWAP
 CMD XMIT:2115-0154Z+0325-0525Z

PASS 0182	NOV 27,1971	NOV 28,1971	DAY 331	332
DSS 14	A.O.S. 331/2111	L.O.S. 332/0725	COMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

0327-0336Z 360 DOWN, TAKEN DOWN DUE TO CORE FRAGMENTATION

PASS 0182	NOV 28,1971	NOV 28,1971	DAY 332	332
DSS 41	A.O.S. 332/0643	L.O.S. 332/1543	COMMANDS 10	RANGING -NIL

DEVIATIONS OR ANOMALIES

0730-0738Z 360 DOWN FOR SCHED. SYSTEM SWAP
2-WAY TRK 0429-1425Z

PASS 0183	NOV 28,1971	NOV 28,1971	DAY 332	332
DSS 62	A.O.S. 332/1329	L.O.S. 332/2140	COMMANDS 189	RANGING NIL

DEVIATIONS OR ANOMALIES

	TCP AS SNR	TCP-AS SNR
ACTUAL-	9.4	5.7
PREDIC-	9.2	6.1
DIFFER	+0.2	-0.4

PASS 0183	NOV 28,1971	NOV 29,1971	DAY 332	333
DSS 12	A.O.S. 332/2042	L.O.S. 333/0742	COMMANDS 17	RANGING -MU

DEVIATIONS OR ANOMALIES

2-WAY-03:09-0735
CMD XMIT-21:15 05:30
0010-0020, 3100 DOWN, SYSTEM HUNG, REINITIALIZED-DR2528
0050-0110Z 360 DOWN, TAKEN DOWN FOR IPL AND "WARM" RESTART
DR2527
0651-0700Z 360 DOWN DTV HUNG UP; RE-IPL; DR2529

PASS 0183	NOV 28,1971	NOV 29,1971	DAY 332	333
DSS 14	A.O.S. 332/2108	L.O.S. 333/0723	COMMANDS 0	RANGING -NIL

DEVIATIONS OR ANOMALIES

ACTUAL-10.0
PREDIC-10.1
DIFFER -0.1
0010-0020Z 3100 DOWN, SYSTEM HUNG, REINITIALIZED;
0050-0110Z 360 DOWN, TAKEN DOWN FOR IPL AND "WARM" RESTART
DR2527
0651-0700Z; 360 DOWN; DTV HUNG UP, RE IPL, DR2529

PASS 0183 NOV 29,1971 NOV 29,1971 DAY 333 333

DSS 41 A.O.S. 333/0657 L.O.S. 333/1440 COMMANDS 17 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK 0750-1422Z CMDS XMTD 1104-1335Z

PASS 0183 NOV 29,1971 NOV 29,1971 DAY 333 333

DSS 42 A.O.S. 333/0713 L.O.S. 333/1421 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

DR T-39 ON EXCESSIVE RESID OF 211 CN SS

PASS 0184 NOV 29,1971 NOV 29,1971 DAY 333 333

DSS 62 A.O.S. 333/1329 L.O.S. 333/2145 COMMANDS 356 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-BE SNR TCP-BE SNR
ACTUAL- 9.4 5.9
PREDIC- 9.2 5.9
DIFFER +0.2 0.0
1509-2050Z 2-WAY CMDS XMTD 1507-1906Z

PASS 0184 NOV 29,1971 NOV 30,1971 DAY 333 334

DSS 12 A.O.S. 333/2040 L.O.S. 334/0738 COMMANDS 15 RANGING MU

DEVIATIONS OR ANOMALIES

0330-0335Z, 360 DOWN, CORE FRAGMENTATION, IPL REQUIRED-DR2527
0659-0706Z, 360 DOWN, TAKEN DOWN AT REQUEST OF PROJECT; UN-
ABLE TO RUN COMGEN, "COLD" IPL REQ. NO DR
2-WAY-2105-0221, 0306-0735Z
CMD XMIT-2138-0221Z

PASS 0184 NOV 30,1971 NOV 30,1971 DAY 334 334

DSS 41 A.O.S. 334/0630 L.O.S. 334/1538 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

0659-0706Z, 360 DOWN, UNABLE TO RUN COMGEN, TAKEN DOWN AT RE-
QUEST OF PROJECT-COLD IPL REQ-NO DR
0856-0903, 360 DOWN FOR RELOAD DUE TO 100% SATURATION ON
MSD PACK
1109-1117, 360 DOWN TO RESTORE PRO DISK PAKS-WARM IPL
2-WAY TRK 0750-1419Z-CMD XMTD 0610-1332

PASS 0184 NOV 30,1971 DEC 01,1971 DAY 334 335

DSS 14 A.O.S. 334/2106 L.O.S. 335/0723 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

ACTUAL-12.4 5.7
PREDIC-12.5 6.6

DIFFER +0.1 -0.9
0330Z-0335Z 360 DOWN DUE TO CORE FRAGMENTATION-IPL REQ

PASS 0185 NOV 30,1971 NOV 30,1971 DAY 334 334

DSS 62 A.O.S. 334/1326 L.O.S. 334/2126 COMMANDS 417 RANGING NIL

DEVIATIONS OR ANOMALIES

 TCP-B-E SNR TCP-B-S SNR
ACTUAL-9.4 5.7
PREDIC-9.3 6.3
DIFFER-0.1 -0.1

PASS 0185 NOV 30,1971 DEC 01,1971 DAY 334 335

DSS 12 A.O.S. 334/2038 L.O.S. 335/0737 COMMANDS 26 RANGING NIL

DEVIATIONS OR ANOMALIES

* PRE-OCCULT:+12/POST OCCULT -1.2
2-WAY: 2105-0735Z
CMD XMIT-2110-0730

PASS 0185 NOV 30,1971 DEC 01,1971 DAY 334 335

DSS 14 A.O.S. 334/2103 L.O.S. 335/0723 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

 TCP B SNR
ACTUAL-12.3 5.5
PREDIC-12.1 6.6
DIFFER +0.2 -1.1

PASS 0185 DEC 01,1971 DEC 01,1971 DAY 335 335

DSS 41 A.O.S. 335/0629 L.O.S. 335/1517 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

0800Z-1006Z SFOF CP DOWN TWO HRS SCHEDULED MAINT FOR POWER
MODIFICATIONS
1023Z-1037Z 360/75 DOWN DUE TO CP INTERFACE PROBLEM JPL DR
2542
TRANS CONFIG TABLE FOR CAL 2 TO STA CAUSE CMD LOOP LOCK TO
DROP REF DR C-054
2-WAY TRK 0750-1416Z CMDS TRANXMTD AT 1100Z-1329Z

PASS 0186 DEC 01,1971 DEC 01,1971 DAY 335 335

DSS 62 A.O.S. 335/1319 L.O.S. 335/2125 COMMANDS 351 RANGING NIL

DEVIATIONS OR ANOMALIES

 TCP-A-2 SNR
ACTUAL- 9.2 5.6
PREDIC- 9.1 5.9
DIFFER +0.1
-WAY TRK-1442-2045Z CMDS XMTD-1447-2040Z
UH MISLABELED 3-WAY VICE 1-WAY-DR-0323

PASS 0186 DEC 01,1971 DEC 02,1971 DAY 335 336

DSS 12 A.O.S. 335/2035 L.O.S. 336/0740 COMMANDS 16 RANGING -MU

DEVIATIONS OR ANOMALIES

2-WAY TRK-2045-0735Z CMDS XMTD-2054-0730Z
DATA MISSING (TDH) 0110-0306Z-DUE TO TDH FAILURE AT STATION
0128:25Z-0128:35Z UNEXPLAINED CMD ALARM 2000-0000-TO BE IN-
VESTIGATED DR C-056

PASS 0186 DEC 01,1971 DEC 02,1971 DAY 335 336

DSS 14 A.O.S. 335/2100 L.O.S. 336/0722 COMMANDS 0 RANGING -NIL

DEVIATIONS OR ANOMALIES

TCP-BS SNR TCP-BS SNR
ACTUAL-12.8 -9.5
PREDIC-12.7 -9.4
DIFFER +0.1 +0.1
3-WAY TRK ONLY-NO CMDS
2248-2329Z-360/75 TAKEN DOWN FOR VERSION SWAP 12.5-NO DR
TCP-B RELOADED DURING OCCULTATION-NO DR
0140-0219Z TCP BETA "W" BUFFER HUNG-UP UNABLE TO GET CONTROL
OF TYPEWRITER-NO DATA LOST-DR N/A-TFR N/A

PASS 0186 DEC 02,1971 DEC 02,1971 DAY 336 336

DSS 41 A.O.S. 336/0636 L.O.S. 336/1518 COMMANDS 7 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-AS SNR
ACTUAL-17.3
PREDIC-18.2
DIFFER -0.9
0829-0834Z 360/75 DOWN-RESTART R/T JOB STEP-DR2552
1512-1518Z 360/75 DOWN-RESTART R/T JOB STEP-DR2555
2-WAY TRK-0750-0805Z, 0836-1414Z-CMD XMTD 0859-1414Z

PASS 0187 DEC 02,1971 DEC 02,1971 DAY 336 336

DSS 62 A.O.S. 336/1319 L.O.S. 336/2145 COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

* TCP-AE SNR TCP-AE SNR
ACTUAL-15.6 16.2
PREDIC-16.1 17.1
DIFFER -0.5 -0.9
CMD ABORT DUE DISABLE MSG-2 WAY TRK-1439-2045Z-CMDS XMTD
1444-2040Z

PASS 0187 DEC 02,1971 DEC 03,1971 DAY 336 337

DSS 12 A.O.S. 336/2035 L.O.S. 337/0740 COMMANDS 24 RANGING -MU

DEVIATIONS OR ANOMALIES

2 WAY TRK-2045Z-CMDS XMTD-2056Z
2041-2046Z-3100 DOWN-RFO UNKNOWN-NO DR
2129-2135Z 360/75 DOWN-TAPE READ/WRITE PROBLEMS-DR2561

2251-2300Z-DIS RELOADED-C/U "CMD ATTEMPT" COUNT IN ERROR (O
VS5) IN FZ.-NO DR
2340Z-CMD XMTD-DIV FORMAT 2-"CMD ATTEMPTS" COUNT UPDATING
OK NOW.
0111-0126Z-360 DOWN-TAPE READ/WRITE PROBLEMS-IPL REQ-DR2561
0145Z-CMDING PROBLEM TCP-A-BLOCK REJECTED DUE TO MAN/HSD
DSBL ALARMS-TCP-A RELOADED-DR C-058 REFERS

PASS 0187 DEC 02,1971 DEC 03,1971 DAY 336 337

DSS 14 A.O.S. 336/2059 L.O.S. 337/0721 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP- B SNR TCP-B SNR
ACTUAL-12.7 9.3
PREDIC-12.8 9.3
DIFFER -0.1 -0.0
3-WAY TRK ONLY-NO CMDS-SCIENCE DATA ON TCP-A ENG. DATA ON
TCP-B
2129-2135Z 360 DOWN-TAPE READ/WRITE PROBLEMS-DR2561
0111-0126Z 360 DOWN-TAPE READ/WRITE PROBLEMS-IPL REQ-DR2561
0413-0419Z 360 DOWN-TAPE READ/WRITE PROBLEMS-LOSS OF OUTPUT-
IPL REQ-DR2562

PASS 0187 DEC 03,1971 DEC 03,1971 DAY 337 337

DSS 41 A.O.S. 337/0716 L.O.S. 337/1529 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK 0745Z-1412Z CMD TIME:0821Z TO 1340Z
0835Z-0855Z 360/75 DOWN 2260 LOCKED OUT DR-2563
1148Z-1157Z 360/75 DOWN RESTARTING R/T JOB STEP REF DR-2563
1207Z-1235Z 360/75 DOWN SYSTEM SWAP FROM A TO B
BAD DATA SET DELAYED COMMAND DATA TRANSFER TEST REF. DR-4133

PASS 0188 NOV 23,1971 DEC 04,1971 DAY 327 338

DSS 12 A.O.S. 327/2030 L.O.S. 338/0738 COMMANDS 18 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK-CMDS XMTD
2103-2118-360/75DOWN-SOE RUN CAUSED-LOCK OUT-DR2568
2246-2302Z 360/75 DOWN-COLD IPL AND WARM RESTART DR2569
0035-0054Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RESTART-DR2569
0306-0323Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RESTART-DR2571
0323-0359Z 360/75 DOWN-LOCKED OUT OF SYSTEM-RE IPL-SWAPPED
SWAPPED STRINGS "B" TO "A"-DR2571
0736-LOS-360/75 DOWN-STRING SWAP "A" TO "B"-SCHEDULED-NO DR

PASS 0188 DEC 03,1971 DEC 03,1971 DAY 337 337

DSS 62 A.O.S. 337/1315 L.O.S. 337/2130 COMMANDS 330 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRACK 1437Z-2037Z CMD XMTD AT 1442Z-2035Z
2103Z-2118Z 360/75 DOWN-SOG RUN CAUSED LOCK OUT DR-2568
POST TRACK REPORT 1517Z-1526Z TCP-A PROGRAM HUNG-UP SWITCHED TO
TCP-B FOR COMMANDING DR-1585

PASS 0188 DEC 03,1971 DEC 04,1971 DAY 337 338

 OSS 14 A.O.S. 337/2056 L.O.S. 338/0720 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-BS SNR TCP-B SNR
 ACTUAL-12.9 9.4
 PREDIC-12.7 9.3
 DIFFER +0.2 +0.1
 2103-2118Z-360/75 DOWN-SOE RUN CAUSED LOCK-OUT-DR2568
 2205-2210Z DIS DOWN-RELOADED-NO DR
 2246-2302Z 360 DOWN-COLD IPL AND WARM RESTART-DR2569
 0035-0054Z 360 DOWN-LOCKED OUT OF SYSTEM-RESTART-DR2569
 0306-0323Z 360 DOWN-LOCKED OUT OF SYSTEM-RESTART-DR2571
 0323-0359Z 360 DOWN-LOCKED OUT OF SYSTEM-RE IPL-STRING SWAP
 "B" TO "A" DR2571
 3 WAY TRK-NO CMDS

PASS 0188 DEC 04,1971 DEC 04,1971 DAY 338 338

 OSS 41 A.O.S. 338/0618 L.O.S. 339/1527 COMMANDS 26 RANGING NIL

DEVIATIONS OR ANOMALIES

0736-0745Z-360 DOWN-STRING SWAP "A" TO "B"-SCHEDULED-NO DR
 0808-0815Z-360 DOWN-COLD IPL AND WARM RESTART-SYS NOT RE-
 SPONDING TO REQUIRED DR2561
 0948-1000Z 360 DOWN-COLD IPL AND WARM RESTART-REF DR2561
 1002-1109Z 360 DOWN-2260'S LOCKED OUT, SWAP RTOSA PACKS;
 COLD IPL/START DR2561-MANUAL COMMANDING DUE TO 360 DOWN
 CMD XMIT: 1025-1322Z/2 WAY TRK: 0746-1410Z

PASS 0189 DEC 04,1971 DEC 04,1971 DAY 338 338

 OSS 62 A.O.S. 338/1313 L.O.S. 338/2130 COMMANDS 23 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK: 1454-2040Z;CMD XMIT: 1530-1731Z

PASS 0189 DEC 04,1971 DEC 05,1971 DAY 338 339

 OSS 12 A.O.S. 338/2026 L.O.S. 339/0738 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

UPLINK
 2-WAY TRK-2040-0730Z CMDS XMTD 2059-0725Z
 0028-0038Z 360/75 DOWN CP/360 INTERFACE PROBLEM-IPL-RESTART-
 DR2529

PASS 0189 DEC 04,1971 DEC 05,1971 DAY 338 339

 OSS 14 A.O.S. 338/2053 L.O.S. 339/0719 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-B-E SNR TCP-B-S SNR
 ACTUAL-12.7 9.3
 PREDIC-12.6 9.1
 DIFFER +0.1 +0.2
 3-WAY TRK ONLY-NO CMDS
 0028-0038Z-360 DOWN-CP/360 INTERFACE PROB. IPL-RESTART-DR2529

PASS 0189 DEC 05,1971 DEC 05,1971 DAY 339 339

DSS 41 A.O.S. 339/0619 L.O.S. 339/1525 COMMANDS 23 RANGING NIL

DEVIATIONS OR ANOMALIES

0750-0803Z 360/75 DOWN-SCHEDULED STRING SWAP "B" TO "A"
NO DR
0906-0931Z 360/75 DOWN-LOCKED OUT OF SYSTEM, IPL REQ DR2574
2-WAY TRK: 0746-1408Z CMDS XMTD 0940-1319Z

PASS 0190 DEC 05,1971 DEC 05,1971 DAY 339 339

DSS 62 A.O.S. 339/1311 L.O.S. 339/2130 COMMANDS 191 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK: 1451-2040Z CMD XMIT:1451-1716
1739-1746Z 360 DOWN, TAKEN DOWN FOR RESTART, UNABLE TO RECALL
MDR ENG. DATA-DR2576

PASS 0190 DEC 05,1971 DEC 06,1971 DAY 339 340

DSS 12 A.O.S. 339/2023 L.O.S. 340/0730 COMMANDS 15 RANGING -NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK-2056-0730Z CMDS XMTD-2110-0250Z
2315-2321Z 360/75 DOWN-DR2578 (ERROR IN MSD PACK-RESTART)
0400Z-DIS LOG TAPE NOT ENABLED-RE-ENABLED BY STATION-NO DR
0450-0503Z 360/75 DOWN-UNABLE TO ALLOCATE TAPES-RESTART
DR2580

PASS 0190 DEC 05,1971 DEC 06,1971 DAY 339 340

DSS 14 A.O.S. 339/2050 L.O.S. 340/0717 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-BS SNR TCP-BS SNR
ACTUAL-13.0 9.2
PREDIC-12.6 9.2
DIFFER +0.4 0.0
2315-2321Z-360/75 DOWN-ERROR ON MSD PACK-RESTART-DR2578
0450-0503Z-360/75 DOWN-UNABLE TO ALLOCATE TAPES-RESTART
DR2580 -3 WAY TRK ONLY-NO CMDS

PASS 0190 DEC 06,1971 DEC 06,1971 DAY 340 340

DSS 41 A.O.S. 340/0638 L.O.S. 340/1425 COMMANDS 12 RANGING -NIL

DEVIATIONS OR ANOMALIES

0828-0834Z-360/75 TAKEN DOWN FOR RESTART, DUE TO P/RESID
PROBS. DR2583
2-WAY TRK 0746-1406Z CMDS XMTD 0823-1340Z

PASS 0190 DEC 06,1971 DEC 06,1971 DAY 340 340

 DSS 42 A.O.S. 340/0810 L.O.S. 340/1400 CCMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

NO D/L OR SNR RECEIVED FROM STA-DATA NOT BEING PROCESSED
 50 BIT H/S DATA BLOCK WAS FULL DATA THROUGHOUT PHASE L/S
 GOOD, PROBLEM UNSOLVED AT EOT. DR1591

PASS 0191 DEC 06,1971 DEC 06,1971 DAY 340 340

 DSS 62 A.O.S. 340/1437 L.O.S. 340/2140 COMMANDS 239 RANGING -NIL
 DEVIATIONS OR ANOMALIES

2-WAY TRK 1449-2135Z CMD XMIT: 1448-2125Z
 1930-1955Z, 3100 DOWN, TAKEN DOWN TO CORRECT DTV PROB.
 DR2588
 1936-1955Z, 360 DOWN, 3100 OUTAGE CAUSED PROBLEM, LOCKED OUT
 BOTH STRINGS, DR2588

PASS 0191 DEC 06,1971 DEC 07,1971 DAY 340 341

 DSS 14 A.O.S. 340/2058 L.O.S. 341/0718 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

TCP AE SNR TCP BS SNR
 ACTUAL-5.1 9.2
 PREDIC-5.6 9.0
 DIFFER-0.5 +0.2
 3-WAY TRK-NO CMDS
 2320-0022Z 360/75 DOWN-R/T JOB STEP-COLD IPL-MISSION RESTART
 SWAP TO BACKUP DISC PACKS-DR2590
 0010-0016Z-TCP-B HALTED-RELOAD REQ-DR1592
 0136-0146Z-360/75 DOWN-COMPUTER TIME 3 MINS SLOW-PROCESSING
 PROBLEMS-RE IPL-RESTART-DR2592

PASS 0191 DEC 06,1971 DEC 07,1971 DAY 340 341

 DSS 12 A.O.S. 340/2125 L.O.S. 341/0730 COMMANDS 11 RANGING -MU
 DEVIATIONS OR ANOMALIES

2-WAY TRK: 2151-0207Z CMDS XMTD 2205-0245Z
 2320-0022Z 360/75 DOWN R/T JOB STEP-COLD IPL-MISSION RESTART
 SWAP TO BACKUP DISC PACKS-DR2590
 0136-0146Z 360/75 DOWN-COMPUTER TIME 3 MINS SLOW-PROCESSING
 PROBLEMS-RE IPL-RESTART-DR2592
 NOTE: DSS 12 MANUAL CMP'ING DUE TO 360/75 PROB. REF DR2590

PASS 0191 DEC 07,1971 DEC 07,1971 DAY 341 341

 DSS 41 A.O.S. 341/0653 L.O.S. 341/1443 CCMANDS 12 RANGING NIL
 DEVIATIONS OR ANOMALIES

0707-0712-TCP-A CMD VERIFICATION PROBLEMS-RELOAD-HSDL SWAP
 DR4160
 0952-0953Z 360/75 DOWN FOR SKED STRING SWAP, SWAP TO "B"
 1008-1030Z 360/75 DOWN DUE TLM PROCESS BACKLOG, R-DUMP
 REQ & RESTART DR2593
 1033-1050Z 360/75 DOWN;COLD IPL/START REQ REF DR2593

PASS 0192	DEC 07,1971	DEC 07,1971	DAY 341	341
DSS 51	A.O.S. 341/1041	L.O.S. 341/1600	COMMANDS 0	RANGING NIL
DEVIATIONS OR ANOMALIES				

PASS 0192	DEC 07,1971	DEC 07,1971	DAY 341	341
DSS 62	A.O.S. 341/1312	L.O.S. 341/2145	COMMANDS 303	RANGING NIL
DEVIATIONS OR ANOMALIES				

1646-55Z 360 DOWN DR2594; 1920-21Z 360 DOWN DR2596; 2010-30Z
360 DOWN DR2596
CMD MESSAGE 161 2 THRU 8 AND 162 1 THRU 7 CONFIRMED BY VOICE
WHILE 360 DOWN

PASS 0192	DEC 07,1971	DEC 08,1971	DAY 341	342
DSS 14	A.O.S. 341/2045	L.O.S. 342/0717	COMMANDS 0	RANGING NIL
DEVIATIONS OR ANOMALIES				

TCP BE SNR TCP BS SNR
ACTUAL-12.8 9.5
PREDIC-12.9 9.5
DIFFER -0.1 0.0
UNABLE TO LOAD AGC CALIB. CURVE-APPARENT HARDWARE PROBLEM
0118Z TCP-B LOST TAPE WRITE CAPABILITY ON LOG TAPE-
WILL RELOAD DURING OCCULTATION DR1594
0128-0147Z 360/75 DOWN-LOCKED OUT OF SYSTEM-"R" DUMP-COLD
IPL-DR2593
0329Z-DIS RELOADED-NO DR
3-WAY TRK-NO CMDS
0255-0304Z 360/75 DOWN-LOCKED OUT OF SYSTEM-COLD IPL-
RESTART-DR2593

PASS 0192	DEC 07,1971	DEC 08,1971	DAY 341	342
DSS 12	A.O.S. 341/2125	L.O.S. 342/0730	COMMANDS 28	RANGING NIL
DEVIATIONS OR ANOMALIES				

2 WAY TRK-2140-0720Z CMDS XMTD-2158-0715Z
2141Z-TCP-A RELOADED. 0058-0115Z-DIS DOWN FOR RELOAD-NO DR
0128-0147Z-360/75 DOWN-LOCKED OUT OF SYSTEM-"R" DUMP-COLD
IPL-DR2593
0255-0304Z-360/75 DOWN-LOCKED OUT OF SYSTEM-COLD IPL DR2593

PASS 0192	DEC 08,1971	DEC 08,1971	DAY 342	342
DSS 41	A.O.S. 342/0651	L.O.S. 342/1440	COMMANDS 8	RANGING NIL
DEVIATIONS OR ANOMALIES				

2 WAY TRK 0736-1401Z

PASS 0193	DEC 08,1971	DEC 08,1971	DAY 342	342
DSS 62	A.O.S. 342/1350	L.O.S. 342/2140	COMMANDS 196	RANGING NIL
DEVIATIONS OR ANOMALIES				

PASS 0193 DEC 08,1971 DEC 09,1971 DAY 342 343

DSS 14 A.O.S. 342/2043 L.O.S. 343/0716 CCMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-BS SNR TCP AE SNR
ACTUAL- 8.8 5.8
PREDIC- 8.8 5.9
DIFFER 0.0 -0.1
0155Z TCP RELOAD DUE TO LOSS OF ODR-WRT CAPABILITY-DR1592
J435-J447Z 360/75 DOWN FOR WARM RESTART-DR2606
3-WAY TRK-NO CMDS

PASS 0193 DEC 08,1971 DEC 09,1971 DAY 342 343

DSS 12 A.O.S. 342/2120 L.O.S. 343/0620 CCMANDS 17 RANGING MU

DEVIATIONS OR ANOMALIES

0435-0447Z 360/75 DOWN FOR WARM RESTART-DR2606
2156-0159Z 2 WAY; 0243-0620Z-CMDS XMTD 2220-0430Z

PASS 0193 DEC 09,1971 DEC 09,1971 DAY 343 343

DSS 41 A.O.S. 343/0545 L.O.S. 343/1415 COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-AS SNR
ACTUAL-17.2
PREDIC-18.1
DIFFER -0.9
MANUAL CMDS DUE 360 TROUBLE DR2608
1037-1043Z 360/75 TAKEN DOWN DUE TO HANG-UP OF LINE PTR IN
SYSTEM-WARM IPL DR
1051-1107Z 360/75 DOWN WARM IPL DID NOT TAKE DR
2 WAY TRK 0636-1357Z CMDS XMTD 1119-1305Z

PASS 0194 DEC 09,1971 DEC 09,1971 DAY 343 343

DSS 62 A.O.S. 343/1426 L.O.S. 343/2140 COMMANDS 317 RANGING NIL

DEVIATIONS OR ANOMALIES

SHIFT CHANGE TO 1614-360 DOWN REF DR2592
DR C060 GENERATED AGAINST BAD CONFIRMATION MESSAGE RECEIVED
AT SFOF FROM DSS 62 TCP BETA
1438-2140Z 2-WAY TRK
1441-2135Z CMD XMTD

PASS 0194 DEC 09,1971 DEC 10,1971 DAY 343 344

DSS 14 A.O.S. 343/2041 L.O.S. 344/0714 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP AS SNR TCP AS SNR
ACTUAL-12.7
PREDIC-12.5
DIFFER +0.2
0119-0130Z 360/75 DOWN 1052-2260Z LOCKED OUT OF SYSTEM DR2571
0228-0230Z 3100 DOWN CAUSED BY DEVELOPMENT TEST

PASS 0194 DEC 09,1971 DEC 10,1971 DAY 343 344

 DSS 12 A.O.S. 343/2120 L.O.S. 344/0500 COMMANDS 18 RANGING MU
 DEVIATIONS OR ANOMALIES

0119-0130Z 360/75 DOWN 1052+2260Z LOCKED OUT OF SYSTEM DR2571
 0228-0230Z 3100 DOWN CAUSED BY- DEVELOPMENT TEST

PASS 0194 DEC 10,1971 DEC 10,1971 DAY 344 344

 DSS 41 A.O.S. 344/0425 L.O.S. 344/1356 COMMANDS 18 RANGING NIL
 DEVIATIONS OR ANOMALIES

2-WAY TRK 0517Z-1354Z CMDS XMTD AT 01006Z-1301Z

PASS 0195 DEC 10,1971 DEC 10,1971 DAY 344 344

 DSS 62 A.O.S. 344/1422 L.O.S. 344/2135 COMMANDS 184 RANGING NIL
 DEVIATIONS OR ANOMALIES

1744-1809Z-360/75 DOWN-OUTPUT STOPPED-LOCKED OUT OF SYSTEM
 RE IPL-DR2624
 2-WAY TRK: 1434-2135Z-CMDS XMITD 1418-2130Z
 1530-17:31Z CC+S U54

PASS 0195 DEC 10,1971 DEC 11,1971 DAY 344 345

 DSS 14 A.O.S. 344/2038 L.O.S. 345/0709 COMMANDS 1 RANGING NIL
 DEVIATIONS OR ANOMALIES

	RX 2 AGC	TCP- BE SNR	TCP- BE SNR
	ACTUAL-141.8	12.5	9.0
	PREDIC-141.8	12.2	8.8
	DIFFER 00.0	+0.3	+0.2
	TCP-BS SNR	TCP- BS SNR	
	ACTUAL-10.6	7.2	
	PREDIC-11.4	8.0	
	DIFFER -0.8	-0.8	

2-WAY 0411-0509 CMD XMIT 0411
 2047-2104Z-DIS DOWN-RELOAD REQ
 0342-STARTED TO BRING DSS 14 UP-2 WAY DUE TO POWER TROUBLE
 AT DSS 12

PASS 0195 DEC 10,1971 DEC 11,1971 DAY 344 345

 DSS 12 A.O.S. 344/2115 L.O.S. 345/0455 COMMANDS 14 RANGING MU
 DEVIATIONS OR ANOMALIES

2152-2350Z 2-WAY AND 0131-0232Z 2 WAY 2153-0128Z AND 0216-
 0310Z CMD XMT.
 0127Z POWER GLITCH AT DSS 12-DR1599
 0131Z RIL AFTER POWER GLITCH AT DSS 12 (1) POWER GLITCH
 0132Z XMTR ON AFTER POWER GLITCH AT DSS 12 KICKED OFF XMTR
 0309Z POWER GLITCH AT DSS 12 -ABORTED 1 CMD
 0314Z POWER GLITCH AT DSS 12 (2) UNABLE TO XMIT
 0336Z DSS 12 ON GEN POWER DC-19 THROUGH
 DSS 12 FOR SAME
 REASON REF DR1599

PASS 0195 DEC 11,1971 DEC 11,1971 DAY 345 345

DSS 41 A.O.S. 345/0416 L.O.S. 345/1351 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK: 0814-1352 CMDS XMTD AT 0730-1352Z
0802-0831Z-360 DOWN DUE TO 3100-360 INTERFACE PROBS-DR2628

PASS 0196 DEC 11,1971 DEC 11,1971 DAY 345 345

DSS 62 A.O.S. 345/1417 L.O.S. 345/2130 COMMANDS 285 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK: 1430-2130Z CMDS XMTD 1414-2125Z

PASS 0196 DEC 11,1971 DEC 12,1971 DAY 345 346

DSS 14 A.O.S. 345/2035 L.O.S. 346/0710 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

	RX 2 AGC	TCP- B SNR	TCP- AS SNR	TCP BE SNR
ACTUAL-143.0	13.0	5.0	8.2	
PREDIC-142.5	12.4	5.5	8.3	
DIFFER -0.5	+0.6	-0.5	-0.1	

TCP- BE SNR

ACTUAL-5.8

PREDIC-5.9

DIFFER-0.1

0219-0230Z 360/75 DOWN IPL AND RESTART DR2632

0524-0537Z 360/75 DOWN 2260'S AND 1052'S LOCKED OUT DR259

0647-0704Z 360/75 DOWN-DR2632

0544-0614Z 360/75 SWITCHED TO SYSTEM A

PASS 0196 DEC 11,1971 DEC 12,1971 DAY 345 346

DSS 12 A.O.S. 345/2045 L.O.S. 346/0450 COMMANDS 18 RANGING MU

DEVIATIONS OR ANOMALIES

0219-0230Z 360/75 DOWN IPL AND RESTART DR2632

2147-0150Z TO 0228-0450Z 2-WAY

2147-0150Z TO 0211-0445Z CMD XMIT

PASS 0196 DEC 12,1971 DEC 12,1971 DAY 346 346

DSS 41 A.O.S. 346/0411 L.O.S. 346/1346 COMMANDS 18 RANGING NIL

DEVIATIONS OR ANOMALIES

0524-0537Z 360/75 DOWN, 2260'S AND 1052'S LOCKED OUT-DR2590

0544-0614Z 360/75 DOWN SWITCHED TO SYSTEM A

0647-0704Z 360/75 DOWN DR2632

1343-1427Z-LOST ALL COMM. CKTS. REPEATER DOWN-DR4216 (TRACK
TERMINATED 1348Z)

PASS 0197 DEC 12,1971 DEC 12,1971 DAY 346 346

 DSS 62 A.O.S. 346/1412 L.O.S. 346/2130 COMMANDS 193 RANGING NIL
 DEVIATIONS OR ANOMALIES

2-WAY TRK: 1424-2130Z CMDS XMTD-1409-2125Z

PASS 0197 DEC 12,1971 DEC 13,1971 DAY 346 347

 DSS 14 A.O.S. 346/2023 L.O.S. 347/0700 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

	RX 2 AGC	RX 2 AGC	TCP- BE SNR	TCP- BE SNR
ACTUAL-	143.3	143.2	12.6	5.7
PREDIC-	142.4	142.3	12.3	5.8
DIFFER	-0.9	-0.9	-0.3	-0.1
	TCP- BE SNR	TCP- BE SNR		
ACTUAL-	12.3	8.7		
PREDIC-	11.9	8.5		
DIFFER	+0.4	+0.2		

0423-0426Z 3100 DOWN-RESTART
 J225-J351Z DOPPLER FIELD WAS ALL ZERO'S, CONTROL 1600

PASS 0197 DEC 12,1971 DEC 13,1971 DAY 346 347

 DSS 12 A.O.S. 346/2105 L.O.S. 347/0500 COMMANDS 15 RANGING MU
 DEVIATIONS OR ANOMALIES

0423-0426Z 3100 HUNG UP-RESTART
 2147-0500Z 2-WAY
 2213-0455Z CMD XMIT

PASS 0197 DEC 13,1971 DEC 13,1971 DAY 347 347

 DSS 41 A.O.S. 347/0415 L.O.S. 347/1342 COMMANDS 18 RANGING NIL
 DEVIATIONS OR ANOMALIES

2 WAY TRK: 0517-1344Z CMD XMIT: 0951-1317Z

PASS 0197 DEC 13,1971 DEC 13,1971 DAY 347 347

 DSS 42 A.O.S. 347/1015 L.O.S. 347/1110 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

PASS 0198 DEC 13,1971 DEC 13,1971 DAY 347 347

 DSS 62 A.O.S. 347/1333 L.O.S. 347/2052 COMMANDS 221 RANGING NIL
 DEVIATIONS OR ANOMALIES

2-WAY TRK-1420-2052Z CMDS XMTD-1404-2041Z
 1330-1740Z-DIS/TCP INTERFACE-50% LOG ERRORS ON MAG TAPES-
 UNABLE TO ESTABLISH INTERFACES-MAG TAPE CONTROL UNIT ROW
 Z-J6, PLUG IN CARD IK-51 BAD-REPLACED-TFR A61215 TO DR
 T-1702
 1851-1857Z 360/75 DOWN-COLD IPL-COLD RESTART REQ-DR2609

PASS 0198 DEC 13,1971 DEC 14,1971 DAY 347 348

DSS 12 A.O.S. 347/2028 L.O.S. 348/0700 COMMANDS 16 RANGING -MU

DEVIATIONS OR ANOMALIES

RX 1 AGC
ACTUAL-150.9
PREDIC-150.5
DIFFER -0.4
0034-0037 ROL ANTENNA OFF-POINT T-1704
0056 RIL SOLID
DR 0333-INCORRECT DOPPLER GROUND MODE SETTING AFTER RIL
2-WAY
2117-0034Z + 0037-0052Z + 0100-0140 + 0217-0700Z 2 WAY
2141-0041Z + 0047-0655 CMD XMIT

PASS 0198 DEC 13,1971 DEC 14,1971 DAY 347 348

DSS 14 A.O.S. 347/2030 L.O.S. 348/0657 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

RX 2.AGC TCP-AS SNR TCP- AS SNR
ACTUAL-143.5 12.5 5.6
PREDIC-142.4 12.3 5.8
DIFFER -1.1 +0.2 -0.2
DR-1705 LOW FILM HEIGHT EOT BRAKES CAME ON ANTENNA
ACTUAL-12.2 8.7
PREDIC-11.8 8.4
DIFFER +0.4 +0.3
DR1705 LOW FILM RIGHT EOT BRAKES CAME ON MAINTENANCE

PASS 0198 DEC 14,1971 DEC 14,1971 DAY 348 348

DSS 41 A.O.S. 348/0630 L.O.S. 349/1338 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK 0717-1338Z CMD XMIT:0946-1241Z
0705-0714Z 360 DOWN FOR IPL, DR2641

PASS 0199 DEC 14,1971 DEC 14,1971 DAY 348 348

DSS 62 A.O.S. 348/1402 L.O.S. 348/2050 COMMANDS 420 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK-1414-2050Z - CMDS XMTD-1358-2045Z

PASS 0199 DEC 14,1971 DEC 15,1971 DAY 348 349

DSS 12 A.O.S. 348/2026 L.O.S. 349/0700 COMMANDS 21 RANGING MU

DEVIATIONS OR ANOMALIES

2124-2131Z 360/75 DOWN UNABLE TO PROCESS DSS 12 TDH-FORCE
DUMP-WARM RESTART-DR2467
0009-0043Z MONITOR DIV DATA DOWN FOR MAINT. LINE DRIVER
IN 2240 ACTING UP.
0131-0136 MONITOR DIV DOWN FOR LINE DRIVE SWAP IN 2240 DR2582
0330-0407 360/75 DOWN FOR IPL DR2656
2107-0130 & 0213-0700Z 2-WAY TRK 2126-0050 & 0210-0655
CMDS XMIT

PASS 0199 DEC 14,1971 DEC 15,1971 DAY 348 349

DSS 14 A.O.S. 348/2028 L.O.S. 349/0710 COMMANDS 0 RANGING MU

DEVIATIONS OR ANOMALIES

* RX 1 AGC TCP- SNR TCP- BE SNR TCP- AS SNR
ACTUAL-143.1 16.9 4.5 12.6/ 5.5
PREDIC-142.4 17.4 5.0 12.2/ 5.8
DIFFER -0.7 -0.5 -0.5 +0.4/-0.3
2124-2131Z 360/75 DOWN-UNABLE TO PROCESS DSS 12 TDH-FORCE
DUMP-WARM RESTART-DR2467
0009-0012Z MONITOR DTV DATA DOWN FOR MAINT. LINE DRIVER IN
2240 ACTING UP.
0034-0043Z MONITOR DTV DOWN FOR LINE DRIVER SWAP IN 2240
DR2582
0131-0136Z MONITOR DTV DOWN TO RETURN 3100-2240Z TO NORMAL
REFERENCE-DR2582
0330-0407Z 360/75 DOWN FOR IPL-DR2651
DR0334 WRITTEN ON STA 14-FAILED TO RESET DOPPLER SWITCH TO
1 WAY ON EXIT OF OCCULTATION

PASS 0199 DEC 15,1971 DEC 15,1971 DAY 349 349

DSS 41 A.O.S. 349/0630 L.O.S. 349/1335 COMMANDS 19 RANGING NIL

DEVIATIONS OR ANOMALIES

2-WAY TRK 0700-1335Z CMDS XMTD-0719-1335Z
MASER 2 PRIME-MASER 1 MANIFOLD BYPASSED DUE HELIUM LEAKS.
TFR/UWV/A58712 REFERS.

PASS 0200 DEC 15,1971 DEC 15,1971 DAY 349 349

DSS 62 A.O.S. 349/1357 L.O.S. 349/2045 COMMANDS 426 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK-1416-2045Z CMDS XMTD-1403-2040Z
1902-1905Z HSDL DOWN-RETRAIN REQ-NO DR
DR T-1709 ANTENNA POINTING PROBLEM

PASS 0200 DEC 15,1971 DEC 16,1971 DAY 349 350

DSS 12 A.O.S. 349/2023 L.O.S. 350/0440 COMMANDS 16 RANGING MU

DEVIATIONS OR ANOMALIES

2 WAY TRK 2102-0440Z CMDS XMTD 2305-0220Z

PASS 0200 DEC 15,1971 DEC 16,1971 DAY 349 350

DSS 14 A.O.S. 349/2025 L.O.S. 350/0709 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP AS SNR
ACTUAL-5.4
PREDIC-5.6
DIFFER-0.2
BDA CKT BREAKER TRIPPED 0525Z, LOST SCI DATA TO 0536 DR1710
020214Z STATION INDICATED 3-WAY DOPPLER MODE WHEN IN FACT
DSS 12 DID NOT GO 2-WAY UNTIL 02080Z DR0336

PASS 0200 DEC 16,1971 DEC 16,1971 DAY 350 350

DSS 41 A.O.S. 350/0410 L.O.S. 350/1331 COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0201 DEC 16,1971 DEC 16,1971 DAY 350 350

DSS 62 A.O.S. 350/1310 L.O.S. 350/2045 COMMANDS 249 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0201 DEC 16,1971 DEC 17,1971 DAY 350 351

DSS 12 A.O.S. 350/2020 L.O.S. 351/0430 COMMANDS 11 RANGING MU

DEVIATIONS OR ANOMALIES

0036 ANTENNA OFF POINT, IN LOCK 2-W 0109 DR T1712

PASS 0201 DEC 17,1971 DEC 17,1971 DAY 351 351

DSS 41 A.O.S. 351/0405 L.O.S. 351/1332 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

0504-0513Z 360/75 DOWN-LOCKED OUT OF SYSTEM TO IPL REF OPEN
DR
0725-0740Z 360/75 DOWN-LOCKED OUT OF SYSTEM-DR2632
0805-0808Z 360 DOWN-TAKEN DOWN FOR MODEL SWAP
0820-0825Z 360 DOWN, BAD LOAD FIRST TIME TAKEN FOR RELOAD
0447-1328Z 2 WAY-0450-1328 CMD XMIT

PASS 0202 DEC 17,1971 DEC 17,1971 DAY 351 351

DSS 62 A.O.S. 351/1349 L.O.S. 351/2040 COMMANDS 145 RANGING NIL

DEVIATIONS OR ANOMALIES

1659-1705 AND 1707-1722 AND 1801-1803Z 3100 CCWN REF DR2665
1400-2040Z 2 WAY TRK-1344-2040Z CMD XMIT
DR T-43 WRITTEN ON SOFTWARE FORMAT 24 DID NOT DISPLAY S/C
DATA FOR AGC STATUS MONITOR, CMD DET AND FTS MADE-SPE
HAD A STATIC VALUE OF 71.

PASS 0202 DEC 17,1971 DEC 18,1971 DAY 351 352

DSS 12 A.O.S. 351/2018 L.O.S. 352/0610 COMMANDS 15 RANGING MU

DEVIATIONS OR ANOMALIES

1477
PTR DR2868
ACTUAL- 12.5 5.2
R-DUMP; IPL DR2671
DIFFER -0.1 -0.9
2 WAY TRK 2058-0610Z CMDS XMITD 2057-0550Z

PASS 0202 DEC 18,1971 DEC 18,1971 DAY 352 352

 DSS 41 A.O.S. 352/0549 L.O.S. 352/1329 COMMANDS 11 RANGING NIL
 DEVIATIONS OR ANOMALIES

0746-0827Z-360/75 DOWN-SCHEDULED STRING SWAP "A" TO "B"
 1310-1343Z 360/75 DOWN-S/C 75 TLM PROCESS STOPPED AT 1257Z
 WHEN S/C 85 PROCESS ENTERED FOR DSS-62 DATA XFER TEST-COLD
 IPL AND WARM RESTART REQ-DR2672
 NO LOS READINGS-IN OCCULTATION - CMDS XMTD 0628-1328Z
 * AOS DELAYED FOR CMD RECALLS-2 WAY TRK-0610-1328Z

PASS 0203 DEC 18,1971 DEC 18,1971 DAY 352 352

 DSS 62 A.O.S. 352/1345 L.O.S. 352/2040 COMMANDS 357 RANGING NIL
 DEVIATIONS OR ANOMALIES

1310-1343Z-360 DOWN-S/C 75 TLM PROCESS STOPPED AT 1257Z WHEN
 S/C 85 PROCESS ENTERED FOR DSS-62 DATA XFER TEST-COLD IPL
 AND WARM RESTART REQ-DR2672
 1351-1355Z-360/75 DOWN-UNABLE TO PROCESS TLM-CANCELLED R/T
 JOB-FORCE "R" DUMP-DR2672 REFERS
 UNSUCCESSFUL-UNABLE TO ACCESS 360-BY MED ENTRIES.
 A COLD IPL AND COLD MISSION RESTART WILL BE ATTEMPTED
 AFTER SDR TAPES ARE WRITTEN.
 1416-1422Z-360/75 DOWN-COLD IPL AND COLD MISSION RESTART REQ
 REF DR2672
 1824-1825Z LOST GODDARD CP-NO DATA LOSS-REF C4263

PASS 0203 DEC 18,1971 DEC 18,1971 DAY 352 352

 DSS 51 A.O.S. 352/1359 L.O.S. 352/1800 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

1416-1422Z 360/75 DOWN-UNABLE TO PROCESS TLM DATA-COLD IPL
 AND COLD MISSION MISSION RESTART REQ-DR2672-DR-T-44
 WRITTEN ON LOW SNR VS PRDX IN THE ENG DATA
 DOPPLER BIAS HIGH DUE TO DIFFERENCE BETWEEN ACTUAL AND
 PREDICTED TSF'S

PASS 0203 DEC 18,1971 DEC 19,1971 DAY 352 353

 DSS 12 A.O.S. 352/2016 L.O.S. 353/0425 COMMANDS 14 RANGING MU
 DEVIATIONS OR ANOMALIES

2016-2122Z DIS DOWN-PROBLEM LOADING DIS/MON PROGRAM-CHANGE
 OF PROGRAM TAPE AND RELOAD CLEARED PROBLEM DR C-0337
 MANUAL CMDS DUE 360 DOWN
 2017-0116Z TDH SAMPLING RATE PROBLEM-CAUSE UNDER INVESTIGA-
 TION DR T-1715 REFERS
 2305-2317Z 360/75 DOWN-I/O ERROR ON MSD PACK-2260'S LOCKED
 OUT OF SYSTEM-WARM IPL AND RESTART-DR2674
 2325Z-2359Z AND 0011-0030Z 360/75 DOWN-REF DR2672 (TLM PRO-
 CESS HUNG UP)
 0057-0109Z 360/75 DOWN-AFTER NATRK ENTERED MED (R83, 75,
 AL) SYSTEM DIED- IPL AND RESTART REQ-DR2675 REFERS
 2 WAY TRK-2040-0425Z CMDS XMTD 2101-0418Z

PASS 0203 DEC 18,1971 DEC 19,1971 DAY 352 353

DSS 14 A.O.S. 352/2017 L.O.S. 353/0706 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2305-2317Z 360/75 DOWN-I/O ERROR ON MSD PACK-2260'S LOCKED
OUT OF SYSTEM-WARM IPL AND RESTART-DR2674
2325-2359Z 360/75 DOWN-TLM PROCESS HUNG UP-IPL AND RESTART
REQ-DR2672
0011-0030Z-360/75 DOWN-TLM PROCESS HUNG UP-IPL AND RESTART
REQ-DR2672
0057-0109Z-360/75 DOWN-AFTER NATRK ENTERED MED (R83,75,AL)
SYSTEM DIED - IPL AND RESTART REQ-DR #2672 REFERS
0405-0417Z TCP-B PROGRAM HALTED-RELOAD REQ-DR T-1716 REFERS
3 WAY TRK-NO CMDS

PASS 0203 DEC 19,1971 DEC 19,1971 DAY 353 353

DSS 41 A.O.S. 353/0335 L.O.S. 353/1326 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

0504Z TCP-A-CMD PROGRAM ANOMOLIES-RELOAD REQ-NO DR
0707-0714Z 360/75 DOWN-LOCKED OUT OF SYSTEM-STRING SWAP "B"
TO "A"-DR2675 REFERS
0728-0737Z 360/75 DOWN-LOCKED OUT OF SYSTEM-IPL REQ-DR2675
REFERS
0744-0814Z 360/75 DOWN-LOCKED OUT OF SYSTEM-SWAPPING ALL
DISC PACKS EXCEPT MSD-COLD IPL-DR2675
0819-1024Z 360/75 DOWN-LOCKED OUT OF SYSTEM-AFTER R84 MED
ENTRY-MSD PACK SATURATED-SWAPPED MSD PACKS "A" SYSTEM
LOST POWER-POWER RESTORED-FRESH MSD PACK ON SYSTEM-DR2675
REFERS
2 WAY TRK-0425-1326Z CMDS XMTD 0443-1326Z

PASS 0204 DEC 19,1971 DEC 20,1971 DAY 353 354

DSS 62 A.O.S. 353/1341 L.O.S. 354/2035 COMMANDS 202 RANGING NIL

DEVIATIONS OR ANOMALIES

IN OCCULTATION AT AOS
1605-1621Z 360/75 DOWN FOR RESTART-IPL-COLD START-DR2676
1353-2035Z 2 WAY
1337-2030Z CMD XMIT

PASS 0204 DEC 19,1971 DEC 20,1971 DAY 353 354

DSS 12 A.O.S. 353/2014 L.O.S. 354/0420 COMMANDS 15 RANGING MU

DEVIATIONS OR ANOMALIES

2253-2309Z 360/75 DOWN-WARM RESTART-REFERENCE DR2677
2340-0037Z 360/75 DOWN-DR2675-BROUGHT UP ON 12.5 VERSION

PASS 0204 DEC 19,1971 DEC 20,1971 DAY 353 354

DSS 14 A.O.S. 353/2015 L.O.S. 354/0703 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2253-2309 360/75 DOWN-WARM RESTART-REFERENCE DR2677
2340-0037 360/75 DOWN-BROUGHT UP ON 12.5 VERSION-DR2675
3 WAY TRK-NO CMDS

PASS 0204 DEC 20,1971 DEC 20,1971 DAY 354 354

 DSS 41 A.O.S. 354/0349 L.O.S. 354/1325 COMMANDS 23 RANGING NIL
 DEVIATIONS OR ANOMALIES

2 WAY TRK-0420-1325Z CMDS XMTD 0438-1325Z

PASS 0204 DEC 20,1971 DEC 20,1971 DAY 354 354

 DSS 42 A.O.S. 354/1005 L.O.S. 354/1200 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

PASS 0205 DEC 20,1971 DEC 20,1971 DAY 354 354

 DSS 62 A.O.S. 354/1338 L.O.S. 354/2045 COMMANDS 173 RANGING NIL
 DEVIATIONS OR ANOMALIES

AOS IN OCCULTATION-MISSED 2 WAY AOS DUE LOW XMTR PWR-REF
 DR T-1718
 1500-1508Z 360/75 DOWN-1052'S LOCKED OUT OF SYSTEM-IPL WARM
 START-DR2681
 1900-FM02, MONITOR, SHOWED "1" CMD ABORT. THERE WERE NO ABRT
 DR1720
 1905-1907-HS DATA DOWN-DR4282
 1935-1944Z-CP "8" DR4287
 DR +1720 ON DIS INDICATING ONE ABORT WHICH DID NOT OCCUR
 1444-2045Z 2 WAY 1434-2039Z CMD XMIT

PASS 0205 DEC 20,1971 DEC 21,1971 DAY 354 355

 DSS 12 A.O.S. 354/2011 L.O.S. 355/0440 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

D-MOD OUT OF LOCK XFER TEST TO 2030 DR T-1721

PASS 0205 DEC 20,1971 DEC 21,1971 DAY 354 355

 DSS 12 A.O.S. 354/2011 L.O.S. 355/0440 COMMANDS 20 RANGING MU
 DEVIATIONS OR ANOMALIES

* TRK TIME EXTENDED BY TRK
 DR T-1722 CMD ABORT DUE CMD MOD OFF
 2 WAY TRK 2118-0440Z CMDS XMTD 2249-0207Z

PASS 0205 DEC 21,1971 DEC 21,1971 DAY 355 355

 DSS 41 A.O.S. 355/0411 L.O.S. 355/1324 COMMANDS 11 RANGING NIL
 DEVIATIONS OR ANOMALIES

2 WAY TRK-0440-1324Z CMDS XMTD-0458-1324Z
 0906-0923Z 360/75 DOWN-MODEL IV OFF LINE-MODEL V ON LINE-
 SCHED. TEST CONFIG. NO DR
 1100-1104Z 360/75 DOWN=UNABLE TO ENTER CMD MEDS-RESTART-NO
 DR-TEST CONFIG
 AOS DELAYED DUE TO R/T SCHEDULING OF VCO FREE-RUN TEST

PASS 0206 DEC 21,1971 DEC 21,1971 DAY 355 355

 DSS 62 A.O.S. 355/1348 L.O.S. 355/2030 COMMANDS 157 RANGING NIL
 DEVIATIONS OR ANOMALIES

1456-1523Z-360/75 DOWN-MODEL V TEST CONFIG. OFF LINE-MODEL
 IV ON LINE
 1842-1849Z-ROL DUE TO ANTENNA DRIVE FAILURE DR1724
 1348-1844Z AND 1849-1903Z 2 WAY
 1903-2025Z CMD XMIT

PASS 0206 DEC 21,1971 DEC 21,1971 DAY 355 355

 DSS 51 A.O.S. 355/1350 L.O.S. 355/1800 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

1456-1523Z-360/75 DOWN-MODEL V TEST CONFIG. OFF-LINE-MODEL
 IV ON-LINE

PASS 0206 DEC 21,1971 DEC 22,1971 DAY 355 356

 DSS 12 A.O.S. 355/2009 L.O.S. 356/0410 COMMANDS 17 RANGING MU
 DEVIATIONS OR ANOMALIES

2047-2122Z 360/75 DOWN FOR VERION SWAP TO 12.7 NO DR
 2 WAY TRK 2046-0410Z CMDS XMTD 2246-0146Z

PASS 0206 DEC 21,1971 DEC 22,1971 DAY 355 356

 DSS 14 A.O.S. 355/2010 L.O.S. 356/0658 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

2047-2122Z 360/75 DOWN FOR VERSION SWAP TO 12.7 NO DR
 3 WAY TRK-NO CMDS

PASS 0206 DEC 22,1971 DEC 22,1971 DAY 356 356

 DSS 41 A.O.S. 356/0340 L.O.S. 356/1324 COMMANDS 18 RANGING NIL
 DEVIATIONS OR ANOMALIES

TCP RELOAD 0616Z DUE TO CMD PROBLEMS-DR-C-065. 2 WAY TRK
 0410-1305Z CMDS XMTD 0427-1305Z
 0711-0745Z 360/75 DOWN-DOA AND COMPUTER HEAVILY BACKLOGGED-
 IPL AND RESTART-DR2698
 0806-0823Z-360/75 DOWN-MODEL IV OFF-LINE-MODEL IV ON-LINE
 TEST CONFIG-SCHEDULED-NO DR
 1111-1152Z-360/75 DOWN-CANCELLED R/T JOB-FORCE "R" DUMP-
 IPL-RESTART-NO DR
 1304-1316Z-360/75 DOWN-ID'S LOCKED OUT OF SYSTEM-IPL-RESTART
 NO DR IN OCCULTATION AT LOS

PASS 0207 DEC 22,1971 DEC 22,1971 DAY 356 356

 DSS 62 A.O.S. 356/1312 L.O.S. 356/2030 COMMANDS 159 RANGING NIL
 DEVIATIONS OR ANOMALIES

1342-1407Z 360/75 DOWN-JO'S LOCKED OUT OF SYSTEM-MODEL V
 OFF-LINE-MODEL IV VER 12.7 ON LINE-NO DR
 1600-1634Z HS PRT 473 DOWN EF-DR2700
 1655-1823Z SFOF ON GENERATOR POWER
 1403-2030Z 2 WAY
 1346-2025Z CMD XMIT

PASS 0207 DEC 22,1971 DEC 23,1971 DAY 356 357

 DSS 12 A.O.S. 356/2006 L.O.S. 357/0410 COMMANDS 11 RANGING MU
 DEVIATIONS OR ANOMALIES

2 WAY TRK 2048-0410 CMD XMIT 2244-0155Z
 0020-0027Z 360 DOWN, CORE LOCKOUT, DR2704
 0247-0306Z 360 DOWN, SOFTWARE PROBLEM, DR2706

PASS 0207 DEC 22,1971 DEC 23,1971 DAY 356 357

 DSS 14 A.O.S. 356/2008 L.O.S. 357/0700 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

0020-0027Z-360 DOWN, CORE LOCKOUT, DR2704
 0247-0306Z-360 DOWN, SOFTWARE PROBLEM, DR2706
 3 WAY TRK-NO CMPS

PASS 0207 DEC 23,1971 DEC 23,1971 DAY 357 357

 DSS 41 A.O.S. 357/0335 L.O.S. 357/1335 COMMANDS 11 RANGING NIL
 DEVIATIONS OR ANOMALIES

2 WAY TRK-0428-1324Z (8HR 56MIN) CMDS XMITD-0426-1305Z
 0951-1005Z 360/75 DOWN-ERRORS ON MSE AND MSD PACKS-WARM IPL
 RESTART-DR2707

PASS 0208 DEC 23,1971 DEC 23,1971 DAY 357 357

 DSS 62 A.O.S. 357/1230 L.O.S. 357/2025 COMMANDS 127 RANGING NIL
 DEVIATIONS OR ANOMALIES

1511-1516Z 360/75 DOWN-ERRORS ON MSA, MSE, MSD DISC PAKS.
 WARM IPL-RESTART-DR2707

PASS 0208 DEC 23,1971 DEC 24,1971 DAY 357 358

 DSS 12 A.O.S. 357/2004 L.O.S. 358/0600 COMMANDS 16 RANGING MU
 DEVIATIONS OR ANOMALIES

2 WAY TRK: 2043-0600 CMD XMIT: 2037-0548Z
 2030Z TCP INTERFACE DOWN AS NO TLM DATA PROCESSED

PASS 0208 DEC 23,1971 DEC 24,1971 DAY 357 358

DSS 14 A.O.S. 357/2006 L.O.S. 358/0702 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0129-0140Z TCP-B PROGRAM HALTED-RELOADED DR T-1727
3 WAY TRK-MO CMDS

PASS 0208 DEC 24,1971 DEC 24,1971 DAY 358 358

DSS 41 A.O.S. 358/0525 L.O.S. 358/1334 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK-0600-1245Z CMDS XMTD-0612-1232Z
0614-0613Z-360 DOWN, BACKLOGGING, IPL REQ, DR2709

PASS 0209 DEC 24,1971 DEC 24,1971 DAY 358 358

DSS 62 A.O.S. 358/1223 L.O.S. 358/2025 COMMANDS 164 RANGING NIL

DEVIATIONS OR ANOMALIES

1432Z-1444Z 360/75 DOWN-LOCKED OUT OF SYS. FORCED R-DUMP RESTART
DR-2708.
1448Z-1456Z 360/75 DWN LOCKED OUT OF SYS.IPL REQ. RESTART DR-
2708.
1500Z-1513Z 360/75 DWN LOCKED OUT OF SYS.COLD IPL COLD START DR-
2712 2-WAY 1303Z-2025Z CMD TRK 1529Z-1706Z

PASS 0209 DEC 24,1971 DEC 25,1971 DAY 358 359

DSS 12 A.O.S. 358/2000 L.O.S. 359/0620 COMMANDS 13 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY-2044-0620Z CMD XMIT 2058-0550Z
2217-2231Z 360 DOWN, REF DR2713

PASS 0209 DEC 24,1971 DEC 25,1971 DAY 358 359

DSS 14 A.O.S. 358/2004 L.O.S. 359/0702 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2217-2235Z 360/75 DOWN LOCKED OUT OF SYSTEM-IPL-DR2713

PASS 0209 DEC 25,1971 DEC 25,1971 DAY 359 359

DSS 41 A.O.S. 359/0528 L.O.S. 359/1330 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

1210-1214Z CARD READER (474) WOULD NOT TAKE CARDS. TROUBLE
WITH 2914
0903-1330Z 2 WAY
0852-1325Z CMD XMIT

PASS 0210	DEC 25,1971	DEC 25,1971	DAY 359	359
DSS 62	A.O.S. 359/1230	L.O.S. 359/2040	COMMANDS 2	RANGING NIL

DEVIATIONS OR ANOMALIES

1857-1900Z DIS DOWN HUNG-UP RELOAD-NO DR
 * EXTENDED TRACK BY TRK CHIEF
 2 WAY TRK

PASS 0210	DEC 25,1971	DEC 26,1971	DAY 359	360
DSS 12	A.O.S. 359/1959	L.O.S. 360/0400	COMMANDS 13	RANGING MU

DEVIATIONS OR ANOMALIES

2 WAY TRK: 2059-0400Z CMD XMIT TIME: 2235-0135Z
 0012-0020Z 360 DOWN, CORE FRAGMENTATION-DR2716
 0244-0304Z, 360 DOWN, CORE FRAGMENTATION, REFER DR2716

PASS 0210	DEC 25,1971	DEC 26,1971	DAY 359	360
DSS 14	A.O.S. 359/2001	L.O.S. 360/0701	COMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

2000-2009Z-NO MONITOR DATA, AGC IN VOLTS; NO TCP/DIS INTER-
 FACE UNTIL 2021, DR T-1720
 0012-0020Z, 360 DOWN, RESTART, CORE FRAGMENTATION-DR2716
 0244-0304Z, 360 DOWN, RESTART, REF DR2716

PASS 0210	DEC 26,1971	DEC 26,1971	DAY 360	360
DSS 41	A.O.S. 360/0258	L.O.S. 360/1330	COMMANDS 14	RANGING NIL

DEVIATIONS OR ANOMALIES

0412-1330Z 2 WAY
 0413-1325Z CMD XMIT

PASS 0211	DEC 26,1971	DEC 26,1971	DAY 360	360
DSS 62	A.O.S. 360/1230	L.O.S. 360/2020	COMMANDS 144	RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK 1349-2020Z CMDS XMTD 1530-1706Z

PASS 0211	DEC 26,1971	DEC 27,1971	DAY 360	361
DSS 12	A.O.S. 360/1956	L.O.S. 361/0400	COMMANDS 12	RANGING MU

DEVIATIONS OR ANOMALIES

2 WAY TRK 2039-0400Z CMD XMIT TIME: 2232-0132Z

PASS 0211	DEC 26,1971	DEC 27,1971	DAY 360 361	
DSS 14	A.O.S. 360/1958	L.O.S. 361/0700	COMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

NO CMDS
 2325-2328, ROL ANTENNA STOPPED, DUE TO 400 HZ CT BREAKER
 TRIPPED, DR T-1730
 2338-2347Z, TCP B FAULTED, REQ RELOAD, DR T-1731

PASS 0211	DEC 27,1971	DEC 27,1971	DAY 361 361	
DSS 41	A.O.S. 361/0325	L.O.S. 361/1330	COMMANDS 12	RANGING NIL

DEVIATIONS OR ANOMALIES

0814 PRINTER 473 DOWN-TAKE UP REEL BAD.
 0419-1330Z 2 WAY
 0419-1327Z CMD XMIT

PASS 0212	DEC 27,1971	DEC 27,1971	DAY 361 361	
DSS 62	A.O.S. 361/1230	L.O.S. 361/2015	COMMANDS 196	RANGING NIL

DEVIATIONS OR ANOMALIES

1424-1442Z VCO INCORRECT ON TDH; OUT OF TOLERANCE-DR T-1732
 2 WAY TRK 1354-2010Z CMDS XMTD 1530-1826Z

PASS 0212	DEC 27,1971	DEC 28,1971	DAY 361 362	
DSS 12	A.O.S. 361/1954	L.O.S. 362/0350	COMMANDS 18	RANGING MU

DEVIATIONS OR ANOMALIES

2 WAY TRK: 2029-0350Z CMD XMIT 2227-0226Z

PASS 0212	DEC 27,1971	DEC 28,1971	DAY 361 362	
DSS 14	A.O.S. 361/2000	L.O.S. 362/0456	COMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK NA CMDS: N/A
 0458-0505, 360 DOWN, RESTART, DR 2730

PASS 0212	DEC 28,1971	DEC 28,1971	DAY 362 362	
DSS 41	A.O.S. 362/0327	L.O.S. 362/1330	COMMANDS 20	RANGING NIL

DEVIATIONS OR ANOMALIES

0458-0505 360 DOWN,NAT CMD ATTEMPTED TO WRITE SOR-AND CAUSED
 HUNG IN TLM PROCESSOR, RESTART-DR2730
 0614-0623Z 360 DOWN, TAKEN DOWN DUE TO CORE FRAGMENTATION,
 DR2731
 0854-0901Z 360/75 DOWN FOR COLD IPL AND RESTART
 0949-1000Z 360/75 DOWN-IPL DR2731
 1125-1128Z 2260 PROBLEM-NO DTV-CAUSE BY MODEL 5 TEST
 0350-1330Z 2 WAY 0402-1325Z CMD XMIT

PASS 0213	DEC 28,1971	DEC 28,1971	DAY 362	362
DSS 62	A.O.S. 362/1230	L.O.S. 362/2013	COMMANDS 138	RANGING NIL

DEVIATIONS OR ANOMALIES

1417-1426Z GODDARD C.P. DOWN, DR C4333
 1505-1520Z GODDARD C.P. DOWN, DR C4335
 2 WAY TRK 1355-2010Z CMDS XMTD 1530-1940Z

PASS 0213	DEC 28,1971	DEC 28,1971	DAY 362	362
DSS 51	A.O.S. 362/1358	L.O.S. 362/1800	COMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

1417-1426 GODDARD C.P. DOWN, DR C-4333
 1505-1520Z GODDARD C.P. DOWN, DR C-4335

PASS 0213	DEC 28,1971	DEC 29,1971	DAY 362	363
DSS 14	A.O.S. 362/1954	L.O.S. 363/0406	COMMANDS 9	RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK: 2225-2400Z, CMD XMIT: 2301-0142Z
 2339-2351Z 360 DOWN DUET CORE FRAGMENTATION, IPL REQ-DR2735
 0023-0045Z, LOST TCP/DIS INTERFACE, TAKEN DOWN FOR RELOAD
 RCVR AGC IN VOLTS VICE DBM, STA UNABLE TO LOAD DIS WITH AGC
 CURVE FOR CORRECT OUTPUT

PASS 0213	DEC 29,1971	DEC 29,1971	DAY 363	363
DSS 41	A.O.S. 363/0230	L.O.S. 363/1330	COMMANDS 18	RANGING NIL

DEVIATIONS OR ANOMALIES

TCP- BS SNR	TCP BS SNR
ACTUAL-14.8	15.7
PREDIC-15.5	16.4
DIFFER -0.2	-0.7

0521-0530Z 360 DOWN SDR WRITE ATTEMPT CAUSE ADRUM FAILURE
 DR2736
 1038-1047Z TCP PROGRAM HUNG UP-DR1738
 1122-1129Z 360/75 DOWN FOR WARM RESTART

PASS 0214	DEC 29,1971	DEC 29,1971	DAY 363	363
DSS 62	A.O.S. 363/1234	L.O.S. 363/2320	COMMANDS 177	RANGING NIL

DEVIATIONS OR ANOMALIES

1447-1459Z H/S DATA BAD REF-DR4341
 1439-1442Z RELOAD TCP A, DUE INTERMITTEN DATA DROP-OUTS
 REF DR T-1739
 2145-2148Z 3100 SYSTEM DOWN, RESTART REQ-DR2739
 DSS-62 DID A TCP RELOAD. NAT CMD WAS NOT NOTIFIED. DR C067
 2 WAY TRK 1349-2010Z CMDS XMTD AT 1336-2302Z

PASS 0214	DEC 29,1971	DEC 30,1971	DAY 363	364
DSS 12	A.O.S. 363/1949	L.O.S. 364/0400	COMMANDS 40	RANGING NIL

DEVIATIONS OR ANOMALIES

2145-2148Z 3100 DOWN, RESTART DR2739
0105-0121Z 360/75 DOWN-SCHEDULED STRING SWAP "A" TO "B"--
NO DR
0152-0208Z 360/75 DOWN-LOCKED OUT OF SYSTEM-FORCE "R" DUMP
WARM IPL-RESTART-DR2742
0213-0305Z 360/75 DOWN-LOCKED OUT OF SYSTEM-CMD MED C42
HANGS UP IN SYSTEM-RE IPL-COLD RESTART-DR2742
ANTENNA OFF POINT-REF PR T 1740
2 WAY TRK 2010-0400Z CMDS XMTD 2023-0145Z

PASS 0214	DEC 29,1971	DEC 30,1971	DAY 363	364
DSS 14	A.O.S. 363/2302	L.O.S. 364/0659	COMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

* LATE ADS DUE TO PROBLEM OF SNOW ON ANTENNA
0105-0121Z 360/75 DOWN-SCHEDULED STRING SWAP "A" TO "B"--
NO DR
0152-0208Z 360/75 DOWN-LOCKED OUT OF SYSTEM-FORCE "R" DUMP
WARM IPL-RESTART-DR2742
0213-0305Z 360/75 DOWN-LOCKED OUT OF SYSTEM-CMD MED C-42
HANGS UP IN SYSTEM-RE IPL-COLD RESTART-DR2742

PASS 0214	DEC 30,1971	DEC 30,1971	DAY 364	364
DSS 41	A.O.S. 364/0322	L.O.S. 364/1250	CCMMANDS 21	RANGING NIL

DEVIATIONS OR ANOMALIES

0612-0621Z 360/75 DOWN-I/O ERRORS ON DISIC-WARM IPL-COLD
RESTART-DR2708

PASS 0215	DEC 30,1971	DEC 30,1971	DAY 364	364
DSS 62	A.O.S. 364/1230	L.O.S. 364/2300	COMMANDS 38	RANGING NIL

DEVIATIONS OR ANOMALIES

TCP AE SNR
ACTUAL-16.2
PREDIC-16.2
DIFFER 0.0
1453-1455 MODEM FAILURE AT GSPC
2 WAY TRK 1240-2000Z CMDS XMTD 1243-1945Z

PASS 0215	DEC 30,1971	DEC 31,1971	DAY 364	365
DSS 14	A.O.S. 364/1948	L.O.S. 365/0627	COMMANDS 7	RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-A SNR TCP-A SNR
ACTUAL-12.5 5.6
PREDIC-12.4 6.0
DIFFER +0.1 -0.4
0648-0657Z 360/75 DOWN, BACKLOGGING, CANX R/T JOB, FORCE "R"

DUMP, WARM IPL, RESTART-DR2748
2 WAY TRK-2000-0000Z CMDS XMTD 2005-2355Z

PASS 0215 DEC 30,1971 DEC 31,1971 DAY 364 365

DSS 12 A.O.S. 364/2117 L.O.S. 365/0715 COMMANDS 55 RANGING NIL

DEVIATIONS OR ANOMALIES

* AOS DELAYED-MASER 1 COOL DOWN-DR T-1745, TFR B01959 REFERS
0648-0657Z-360/75 DOWN-BACKLOGGING, CANX R/T JOB, FORCE "R"
DUMP,-WARM IPL-RESTART-DR2748
2 WAY TRK 0000-0710Z CMDS XMTD 0010-0655Z

PASS 0215 DEC 31,1971 DEC 31,1971 DAY 365 365

DSS 41 A.O.S. 365/0641 L.O.S. 365/1330 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

AOS 0641Z-360/75 DOWN
0648-0657Z 360/75 DOWN BACKLOGGING-CANX R/T FORCE "R" DUMP
WARM IPL-RESTART-DR2748
0729-1336 2 WAY
0729-1315 CMD XMT

PASS 0216 DEC 31,1971 DEC 31,1971 DAY 365 365

DSS 62 A.O.S. 365/1230 L.O.S. 365/2005 COMMANDS 395 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK: 1349-2005, CMD XMIT: 1600-1939Z
1527-1532Z 360 DOWN-WARM RESTART-CAUSED BY OPERATIONAL PRO-
CEDURES
1537-1541Z 3100 DOWN, RELOAD, DR2739
1918-1930Z 360 DOWN, IPL REQUIRED WITH WARM RESTART, REF
DR2731

PASS 0216 DEC 31,1971 JAN 01,1972 DAY 365 001

DSS 12 A.O.S. 365/1944 L.O.S. 001/0700 COMMANDS 297 RANGING NIL

DEVIATIONS OR ANOMALIES

0021-0027Z-360/75 DOWN-INCORRECT COMPUTER TIME-COLD IPL-
COLD RESTART-DR-NCNE
0239-0241Z ODR LOGGING PROBLEM TCP-A-RELOAD REQ-DR T-1746

PASS 0216 DEC 31,1971 JAN 01,1972 DAY 365 001

DSS 14 A.O.S. 365/1946 L.O.S. 001/0657 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0021-0027Z 360/75 DOWN-INCORRECT COMPUTER TIME-COLD IPL-COLD
RESTART-DR-NONE
3 WAY TRK-NO CMDS

PASS 0216 JAN 01,1972 JAN 01,1972 DAY 001 001

 DSS 41 A.O.S. 001/0623 L.O.S. 001/1330 COMMANDS 23 RANGING NIL
 DEVIATIONS OR ANOMALIES
 2 WAY TRACK 0719Z-1330Z
 CMDS XMITTED 1049Z-1221Z

PASS 0217 JAN 01,1972 JAN 01,1972 DAY 001 001

 DSS 62 A.O.S. 001/1230 L.O.S. 001/1925 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES
 SNOW STORM AT DSS-62, UNABLE TO ACCURATELY RESOLVE TLM
 RESIDUALS
 * STATION RELEASED DUE HEAVY SNOW STORM
 2 WAY TRK-1330-1925Z
 NO CMDS-CMD MOD ON-1345-1913Z

PASS 0217 JAN 01,1972 JAN 02,1972 DAY 001 002

 DSS 12 A.O.S. 001/1921 L.O.S. 002/0600 COMMANDS 45 RANGING MU
 DEVIATIONS OR ANOMALIES
 2335Z-DOPPLER NOISE OUT OF TOLERANCE-NOISY TRACKING DATA-
 DR0341
 0032-0037Z-360/75 DOWN-HEAVILY BACKLOGGED, PRDX RUN, CMD
 ACTIVITY-WARM RESTART-DR2752
 * EARLY AOS DUE SNOW STORM AT DSS-62 (RELEASED EARLY)

PASS 0217 JAN 01,1972 JAN 02,1972 DAY 001 002

 DSS 14 A.O.S. 001/1945 L.O.S. 002/0655 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES
 0032-0037Z 360/75 DOWN-HEAVILY BACKLOGGED, PRDX RUN, CMD
 ACTIVITY, WARM RESTART-DR2752
 3 WAY TRK - NO CMDS

PASS 0217 JAN 02,1972 JAN 02,1972 DAY 002 002

 DSS 41 A.O.S. 002/0526 L.O.S. 002/1330 COMMANDS 32 RANGING NIL
 DEVIATIONS OR ANOMALIES
 2 WAY TRK 0620-1330Z CMDS XMTD 0629-1240Z

PASS 0218 JAN 02,1972 JAN 02,1972 DAY 002 002

 DSS 62 A.O.S. 002/1232 L.O.S. 002/2000 COMMANDS 2 RANGING NIL
 DEVIATIONS OR ANOMALIES
 2 WAY TRK-1330-2000Z CMDS XMTD AT 1345-1949Z

PASS 0218	JAN 02,1972	JAN 03,1972	DAY 002	003
DSS 12	A.O.S. 002/1940	L.O.S. 003/0400	COMMANDS 8	RANGING MU

DEVIATIONS OR ANOMALIES

0137-0145Z CMD DET OUT OF LOOP LOCK-LOSS OF CMDING CAPABILITY-POSSIBLE CAUSE, STA. OFFSET ON ANTENNA 0116:38Z, ALSO
 COULD HAVE CAUSED LOSS OF CMD. MODULATION-NO DR
 2 WAY TRK-2000-0345Z CMDS XMTD 2000-0345Z

PASS 0218	JAN 02,1972	JAN 03,1972	DAY 002	003
DSS 14	A.O.S. 002/1941	L.O.S. 003/0654	COMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

0633-0638Z 360/75 DOWN-SCHED. STRING SWAP "A" TO "B"-NO DR
 3 WAY TRACK NO CMDS

PASS 0218	JAN 03,1972	JAN 03,1972	DAY 003	003
DSS 41	A.O.S. 003/0330	L.O.S. 003/1300	COMMANDS 12	RANGING NIL

DEVIATIONS OR ANOMALIES

0633-0638Z-360/75 DOWN-SKED STRING SWAP-"A" TO "B"-NO DR
 0908-0922Z-360/75 DOWN-DUE RTJS ABENDING; DUMP AND WARM
 START REQ-DR2755
 2 WAY TRK 0420-1300Z CMDS XMTD 0534-1212Z

PASS 0219	JAN 03,1972	JAN 03,1972	DAY 003	003
DSS 62	A.O.S. 003/1230	L.O.S. 003/2000	COMMANDS 170	RANGING NIL

DEVIATIONS OR ANOMALIES

1703-1712Z LOW SPEED DATA FROM GODDARD DOWN-CR4365

PASS 0219	JAN 03,1972	JAN 03,1972	DAY 003	003
DSS 51	A.O.S. 003/1351	L.O.S. 003/1800	COMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

1201-1212Z LOW SPEED DATA FROM GODDARD DOWN-DR4363

PASS 0219	JAN 03,1972	JAN 04,1972	DAY 003	004
DSS 12	A.O.S. 003/1937	L.O.S. 004/0400	COMMANDS 16	RANGING MU

DEVIATIONS OR ANOMALIES

2 WAY TRK-2000-0400Z CMDS XMTD-2011-0345Z

PASS 0219 JAN 03,1972 JAN 04,1972 DAY 003 004

DSS 14 A.O.S. 003/1940 L.O.S. 004/0653 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

0003-0511Z TDH SUBSYSTEM FAILED-LOST 5HR 11MIN TRACKING DATA
STA REPAIRED-FOUND BAD CARDS. REF DR0343
DIS LOG TAPE RED ENTIRE PASS-REF DR T-1747
DR T-1748
DR T-45 ON LOW 16.2KBPS SNR RSID

PASS 0219 JAN 04,1972 JAN 04,1972 DAY 004 004

DSS 41 A.O.S. 004/0330 L.O.S. 004/1300 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 0420Z-1300Z
CMDS XMITTED 0532Z-1211Z

PASS 0219 JAN 04,1972 JAN 04,1972 DAY 004 004

DSS 42 A.O.S. 004/0959 L.O.S. 004/1200 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0220 JAN 04,1972 JAN 04,1972 DAY 004 004

DSS 62 A.O.S. 004/1230 L.O.S. 004/1955 COMMANDS 170 RANGING NIL

DEVIATIONS OR ANOMALIES

1713Z DSS-62 SWITCHED FROM TCP "A" TO TCP "B" SCHEDULE
SWITCH
TLM DR T46 D/L DECREASED BY 1.0DB AFTER MERIDIAN XING
(1746Z)
1320-1955Z 2 WAY
1320-1940Z CMD XMIT

PASS 0220 JAN 04,1972 JAN 05,1972 DAY 004 005

DSS 12 A.O.S. 004/1930 L.O.S. 005/0500 COMMANDS 22 RANGING MU

DEVIATIONS OR ANOMALIES

2215-2227Z-360/75 DOWN FOR WARM RESTART AND IPL-DR2639
2238-2249Z-360/75 DOWN FOR WARM RESTART AND IPL-DR2639
* LATE AOS DUE STATION 41 PROBLEMS OF LOCKING ON 2KBS DATA
2 WAY TRK-1955-0430Z CMDS XMTD 2010-0415Z

PASS 0220 JAN 04,1972 JAN 04,1972 DAY 004 004

DSS 14 A.O.S. 004/1937 L.O.S. 004/2300 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2215-2227Z 360/75 DOWN-IPL, WARM RESTART, REF-DR2639
2238-2249Z 360/75 DOWN-IPL, WARM RESTART, REF-DR2639

* DSS-14 RELEASED AT 2300Z TO CORRECT AN ANTENNA BEARING
PROBLEM. ESTIMATED TIME REQUIRED

PASS 0220	JAN 05, 1972	JAN 05, 1972	DAY 005 005
DSS 41	A.O.S. 005/0330	L.O.S. 005/1300	COMMANDS 19 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK 0420-1300Z CMDS XMTD 0532-1211Z
URE BETWEEN CANBERRA AND STA, REF DR'S-4386,4387,4388.
0556-0603Z-36/75 DOWN-CMD SDR TAPE WRITE PROBLEMS-COLD IPL
COLD RESTART-DR2752
2 WAY TRK 0450-1300Z

PASS 0221	JAN 05, 1972	JAN 05, 1972	DAY 005 005
DSS 62	A.O.S. 005/1230	L.O.S. 005/1955	COMMANDS RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0221	JAN 05, 1972	JAN 06, 1972	DAY 005 006
DSS 12	A.O.S. 005/1930	L.O.S. 006/0400	COMMANDS 10 RANGING MU

DEVIATIONS OR ANOMALIES

2111:59Z-2112:01Z 360/75 CMD PROCESSOR ALLOWED TWO CMDS TO
BE TRANSMITTED WITHIN FIVE (5) SEC OF EACH OTHER-THE TCP
REJECTED BOTH FOR ILLEGAL PRIORITY. BOTH CMDS WERE DE
LAYED. DR C074
2 WAY 2015-0356Z CMDS XMTD 2006-0345Z

PASS 0221	JAN 05, 1972	JAN 06, 1972	DAY 005 006
DSS 14	A.O.S. 005/1935	L.O.S. 006/0625	COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2158-2210Z-360/75 DOWN-RESTART-NO DR
0555-0608Z-360/75 DOWN-I/O SYSTEM LOCKED OUT-DR2752
0650-0655Z-360/75 DOWN-WARM RT JOB STEP-DR2708

PASS 0221	JAN 06, 1972	JAN 06, 1972	DAY 006 006
DSS 41	A.O.S. 006/0330	L.O.S. 006/1300	COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

0555-0608Z 360/75 DOWN, I/O SYST LOCKOUT DR2752
0650-0655Z 360/75 DOWN, WARM RT JOB STEP DR2708
2 WAY TRK 0420-1300Z CMDS XMTD 0457-1208Z

PASS 0222 JAN 06,1972 JAN 06,1972 DAY 006 006

 DSS 62 A.O.S. 006/1230 L.O.S. 006/1950 COMMANDS 181 RANGING NIL
 DEVIATIONS OR ANOMALIES
 TCP-8 1220 1 13 0

PASS 0222 JAN 06,1972 JAN 07,1972 DAY 006 007

 DSS 12 A.O.S. 006/1930 L.O.S. 007/0500 COMMANDS 8 RANGING MU
 DEVIATIONS OR ANOMALIES
 2007-2028Z NO HSDL GCF SWAP SYNCHRON AND 360/75 DID NOT
 0123Z-DSN DIV FORMATS NOT UPDATING 360 PROB SEE NEXT ENTRY
 0149-0155Z 360/75 DOWN-WARM RESTART-DR2775
 0354-0410Z 360/75 DOWN-WARM RESTART-DR2776
 2 WAY 291J-0452Z
 CMD 2001-0445Z

PASS 0222 JAN 06,1972 JAN 07,1972 DAY 006 007

 DSS 14 A.O.S. 006/1932 L.O.S. 007/0651 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES
 0123Z DSN DTV FMTS NOT UPDATING PROBLEM 360/75-3100 INTER-
 FACE
 0149-0155Z 360/75 DOWN TO CLEAR DIV PROBLEM; WARM RESTART
 DR2775
 0354-0410Z 360/75 DOWN-WARM RESTART-DR2776

PASS 0222 JAN 07,1972 JAN 07,1972 DAY 007 007

 DEVIATIONS OR ANOMALIES
 0715-0840Z 360/75/3100 PROBLEMS, LOST DSN DIV FMT CAPABILITY
 GOING TO SKED STRING SWAP TO "A"
 0846-0856Z 360/75 DOWN; COLD IPL WARM RESTART-NO DR
 1040-1047Z TCP RE-LOAD DUE CMD PROBLEMS REF DR C-038
 1027-1032Z 360/75 DOWN FOR RESTART, DUE NATTRK NOT LOGGING
 DR2778
 1259-1306Z 360/75 DOWN FOR RESTART, DUE NATTRK NOT LOGGING
 DR2780
 2WAY TRK 0520-1300Z CMDS XMTD 0530-1207Z

PASS 0223 JAN 07,1972 JAN 07,1972 DAY 007 007

 DSS 62 A.O.S. 007/1230 L.O.S. 007/1950 COMMANDS 260 RANGING NIL
 DEVIATIONS OR ANOMALIES
 1827-1833Z 360/75 DOWN-CMD SDR LOGGING PROBLEM, COLD IPL,
 WARM RESTART-DR2752
 1844-1850Z 360/75 DOWN-CMD SDR LOGGING PROB, COLD IPL,
 RESTART-DR2752
 1935-1943Z HSDL DOWN-RETRAIN REQ FROM STA-REF-DR4429
 2 WAY TRK-1300-1950Z CMDS XMTD 1315-1935Z

PASS 0223 JAN 07,1972 JAN 08,1972 DAY JJ7 J08

 DSS 12 A.O.S. 007/1928 L.O.S. 008/0426 COMMANDS 9 RANGING NIL

 DEVIATIONS OR ANOMALIES
 2249-2258Z HSDL DOWN-MADR MICROWAVE FAILURE BETWEEN SHADOW
 MTN AND GOLDSTONE-REF DR4431
 2258-2305Z 360/75 DOWN-DOA PROBLEMS-COLD IPL-WARM RESTART
 REQ-DR2753
 0319-0339Z 360/75 DOWN, KEYBOARD LOCKOUT WARM RE-START
 DR2782 CMD XMIT 2000-0400 2 WAY 2000-0426

PASS 0223 JAN 07,1972 JAN 08,1972 DAY 007 008

 DSS 14 A.O.S. 007/1929 L.O.S. 008/0650 COMMANDS 0 RANGING NIL

 DEVIATIONS OR ANOMALIES
 2258-2305Z-360/75 DOWN-DOA PROBLEMS-COLD IPL-WARM RESTART
 REQ-DR2753
 0319-0399Z 360/75 DOWN-KEYBOARD LOCKOUT WARM RESTART-DR2782
 0522-0535Z 360/75 DOWN, TAPE DRIVE LOCKOUT WARM RESTART
 DR2783

PASS 0223 JAN 08,1972 JAN 08,1972 DAY 008 008

 DSS 41 A.O.S. 008/0430 L.O.S. 008/1230 COMMANDS 15 RANGING NIL

 DEVIATIONS OR ANOMALIES
 0522-0535Z 360/75 DOWN-TAPE DRIVE LOCKOUT DR2783
 0825-0827Z 360/75 DOWN-SWITCHED TO STRING "B"-SCHEDULED
 SWITCHED. 0809 C.P. SWAP
 0931-0932Z 360/75 DOWN FOR COLD IPL-REF DR2785
 0500-1000Z CMD TRANSMISSION PROBLEMS-DR2785
 TLM: RAIN STORMS AT DSS-41

PASS 0224 JAN 08,1972 JAN 08,1972 DAY 008 008

 DSS 62 A.O.S. 008/1200 L.O.S. 008/1945 COMMANDS 150 RANGING NIL

 DEVIATIONS OR ANOMALIES
 1346-1348Z CMA SUBCARRIER FREQ. FO CHANGED AFTER D/XFER TEST
 FROM 255.4 TO 255.3, STA 62 OPR ERROR-DR T-1756
 1359Z-TXR OFF-ARC DETECTOR ALARM-REF-DR T-1757
 USED MASER 2
 2 WAY TRK-1230-1945Z CMDS XMTD 1245-1930Z

PASS 0224 JAN 08,1972 JAN 09,1972 DAY 008 J09

 DSS 12 A.O.S. 008/1925 L.O.S. 009/0600 COMMANDS 10 RANGING MU

 DEVIATIONS OR ANOMALIES
 2331-2345Z CMD MDR AND SDR TAPES NOT LOGGING-COLD IPL AND
 COLD RESTART-DR2787
 2 WAY 1906-0552Z CMDS 1956-0545Z

PASS 0224	JAN 08,1972	JAN 09,1972	DAY 008 009
DSS 14	A.O.S. 008/1927	L.O.S. 009/0650	CCMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

2331-2345Z CMD MDR AND SDR NOT LOGGING-COLD IPL AND COLD
 RESTART-DR2787
 0639-0651 360/75 DOWN-WARM IPL-DR2752
 0649 STATION LOS

PASS 0224	JAN 09,1972	JAN 09,1972	DAY 009 009
DSS 41	A.O.S. 009/0530	L.O.S. 009/1230	CCMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

0639-0651Z 360/75 DOWN WARM IPL-DR2752
 0655-0656 HSDL DOWN-DR4446
 0734-0740Z 360/75 FOR STRING SWAP B TO A-NO DR
 0743-0755Z 360/75 DOWN-WARM IPL-NO DR
 1017-1022Z 360/75 DOWN-COLD START
 TLM: RAIN STORMS IN WOOMERA

PASS 0225	JAN 09,1972	JAN 09,1972	DAY 009 009
DSS 62	A.O.S. 009/1200	L.O.S. 009/1945	COMMANDS 140 RANGING NIL

DEVIATIONS OR ANOMALIES

1251Z U/L LOST DURING STA TRANSFER, EXC/SYNTH LOOP SHORTED
 TWO SECONDS AFTER TUNING BEGAN-DR T-1759
 2-WAY TRK-1230-1945Z CMDS XMTD 1245-1930Z

PASS 0225	JAN 09,1972	JAN 10,1972	DAY 009 010
DSS 12	A.O.S. 009/1923	L.O.S. 010/0400	COMMANDS 10 RANGING MU

DEVIATIONS OR ANOMALIES

2314-0010Z TCP-A ODR LOST LOGGING CAPABILITY, RELOAD OF TCP
 PROGRAM REQ, DELAYED DUE TO COMMANDING ACTIVITY, REF
 DR1760

PASS 0225	JAN 09,1972	JAN 10,1972	DAY 009 010
DSS 14	A.O.S. 009/1927	L.O.S. 010/0649	COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0225	JAN 10,1972	JAN 10,1972	DAY 010 010
DSS 41	A.O.S. 010/0326	L.O.S. 010/1230	COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

1659-0715Z 360 DOWN WARM IPL WARM RESTART-DR2791
 0737Z DSS 41 SWITCHED TCP-B TO TCP-A. SCIENCE DATA WOULD
 NOT SYNC. ON TCP B. DR T 1761

PASS 0227	JAN 11,1972	JAN 12,1972	DAY 011	012
DSS 12	A.O.S. 011/1918	L.O.S. 012/0435	COMMANDS	RANGING NIL
DEVIATIONS OR ANOMALIES				

1940-1942Z 3100 HUNG UP-RESTART REQUIRED-NO DR
 2239-2246Z 360/75 DOWN-WARM RESTART-DR2731
 2 WAY 2001-0435
 CMD 1951-0420Z

PASS 0227	JAN 11,1972	JAN 12,1972	DAY 011	012
DSS 14	A.O.S. 011/1920	L.O.S. 012/0647	COMMANDS 2	RANGING NIL
DEVIATIONS OR ANOMALIES				

1940-1942Z 3100 HUNG UP-RESTART REQ. NO DR
 2239-2246Z 360/75 DOWN-WARM RESTART-DR2731

PASS 0227	JAN 12,1972	JAN 12,1972	DAY 012	012
DSS 41	A.O.S. 012/0327	L.O.S. 012/1215	COMMANDS 1	RANGING NIL
DEVIATIONS OR ANOMALIES				

0750-0753Z LOST DSN DTV CAPABILITY
 0913-0922Z 360/75 DOWN- WARM RESTART DR 2811

PASS 0228	JAN 12,1972	JAN 12,1972	DAY 012	012
DSS 62	A.O.S. 012/1128	L.O.S. 012/1940	COMMANDS 95	RANGING NIL
DEVIATIONS OR ANOMALIES				

1717Z-1730Z-360/75 DOWN-CORE FRAG PROBS-WARM IPL-WARM RESTART-
 DR2731
 2 WAY TRACK-1213Z-1940 CMDS XMTD 1222Z-1925Z

PASS 0228	JAN 12,1972	JAN 12,1972	DAY 012	012
DSS 51	A.O.S. 012/1355	L.O.S. 012/1800	COMMANDS 11	RANGING NIL
DEVIATIONS OR ANOMALIES				

1717Z-1730Z-360/75 DOWN-CORE FRAG PROBS WARM RESTART-DR2731
 S/L -2.5DB DR T-49
 3 WAY TRK-NO CMDS

PASS 0228	JAN 12,1972	JAN 13,1972	DAY 012	013
DSS 12	A.O.S. 012/1916	L.O.S. 013/0400	COMMANDS 2	RANGING NIL
DEVIATIONS OR ANOMALIES				

0328-0338Z-360/75 DOWN TOTAL SYSTEM LOCK-OUT-WARM IPL/WARM RE
 -START-DR# 4776
 2-W TK 2001-0400Z CMDS XMTD 2155-0021Z

PASS 0228 JAN 12,1972 JAN 13,1972 DAY 012 013

 DSS 14 A.O.S. 012/1918 L.O.S. 013/0646 COMMANDS RANGING NIL

DEVIATIONS OR ANOMALIES

TELEM TCP 16.2K SNR TCP 8.1K SNR
 ACTUAL- 4.4 7.4
 PREDIC- 5.2 7.8
 DIFFER- -0.8 -0.4
 2051Z-TCP-B TAPE WRITE SUB-ROUTINE HUNG-UP-RELOAD DR T-1768
 0129Z-TCP-B LOST ODR TAPE LOG CAPABILITY RELOAD DR T-1769
 0328-0338Z-360/75 DOWN TOTAL SYSTEM IO LOCK-OUT WARM IPL/RESTA
 RT DR 4776
 0417-0424Z-360/75 DOWN RECOVERY DUE TLM POCCESS B/L WARM IPL DR
 2752
 0505-0521Z-360/75 DOWN TLM PROCESS B/L COLD IPL DR 2676

PASS 0228 JAN 13,1972 JAN 13,1972 DAY 013 013

 DSS 41 A.O.S. 013/0324 L.O.S. 013/1230 COMMANDS 17 RANGING NIL

DEVIATIONS OR ANOMALIES

0328-0338Z 360/75 DOWN TOTAL SYSTEM LOCKOUT-WARM IPL/WARM REST
 ART DR 4776
 0343Z TCP-A RELOAD DUE TO CMD. PROBLEMS
 0417-0424Z-360/75 DOWN RECOVERY DUE TLM PROCESSB/L WARM IPL DR
 2752
 0505-0521Z-360/75 DOWN TLM PROCESS B/L COLD IPL DR 2676
 0545Z TCPA RELOAD; DUE TO CMD. PROBLEMS; EXCITER FREQ. OFF. RE
 F DR C-077
 1141-1209-360/75 DOWN STRING SWAP DR 2822
 0536-TX OF STD L TO STA. 41 CHGO.EXC.FREQ. AND S/C ID IN ERROR.
 DR. REF. C077

PASS 0229 JAN 13,1972 JAN 13,1972 DAY 013 013

 DSS 62 A.O.S. 013/1200 L.O.S. 013/1935 COMMANDS 144 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK:
 CMD XMIT: 1530Z TO 1639Z
 1141-1209,360 DOWN-STRING SWAP-DR 2822

PASS 0229 JAN 13,1972 JAN 14,1972 DAY 013 014

 DSS 12 A.O.S. 013/1914 L.O.S. 014/0500 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

2308-2324Z-360 DOWN, RESTART WITH COLD IPL. REQUIRED, CORE FRA
 G. DR 2824
 0331-0339Z-360/75B T/DOWN DUE 2260 DEVICE PROBLEM-W/IPL DR2824
 0402-0422Z CP/360 INTERFACE PROBLEMS DR'S 4527-4528
 NATEL DR T-51 D/L-1.1 DB BELOW PRDX.
 2-WTK 1956-0500
 CMDS XMTD @2130-0004

PASS 0229 JAN 13,1972 JAN 14,1972 DAY 013 014

DSS 14 A.O.S. 013/1916 L.O.S. 014/0645 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TELEM TCP 8.1K TCP 16.2K
 ACTUAL 7.2 ACTUAL 4.8
 PRED. 7.7 PRED 5.4
 DIFF. -0.5 DIFF -0.6

2308-2324Z 360 DOWN RESTART WITH COLD IPL REQUIRED.CORE FRAG.D
 R 2824
 0331-0339Z 360/758 T/DOWN DUE 2260 DEVICE PROBLEMS-W/IPL DR 28
 24
 0402-0422Z CP FAULT AND 360 INTERFACE PROBLEMS DR 4527-4528

PASS 0229 JAN 14,1972 JAN 14,1972 DAY 014 014

DSS 41 A.O.S. 014/0427 L.O.S. 014/1300 COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

0825-0832 360/75 DOWN- 2260 LOCKED OUT DUE TO OPERATOR DC ABEN
 DS DR 2830
 0521-1300 2W
 0521-1245 CMD. XMT.

PASS 0230 JAN 14,1972 JAN 14,1972 DAY 014 014

DSS 62 A.O.S. 014/1230 L.O.S. 014/1935 COMMANDS 238 RANGING NIL

DEVIATIONS OR ANOMALIES

SNOW STORM AT STATION
 2 WAY 1301-1921Z
 CMDS. 1302-1920Z

PASS 0230 JAN 14,1972 JAN 15,1972 DAY 014 015

DSS 12 A.O.S. 014/1912 L.O.S. 015/0504 COMMANDS 7 RANGING NIL

DEVIATIONS OR ANOMALIES

1932-1934Z DIS DOWN FOR S/C ID CHANGE
 2001-2020Z 360/758 DOWN, CORE FRAGMENTATION. REF DR 2824
 0135Z-0142Z 360/758-DOWN,CORE FRAGMENTATION. REF DR 2824
 0110Z DR T-1771 LOSS OF CMD LOOP LOCK
 2-W TK 1956-0504Z
 CMDS XMTD @ 1900-0425Z

PASS 0230 JAN 14,1972 JAN 15,1972 DAY 014 015

DSS 14 A.O.S. 014/1913 L.O.S. 015/0648 COMMANDS 00 RANGING NIL

DEVIATIONS OR ANOMALIES

2001-2020Z-360/758 DOWN DUE TO CONFIG.,REF DR#2824
 2255-2315Z-DIS LGWR BUFFER HUNG UP.NO DR
 0135-0144Z 360/75 DOWN FOR RESTART DR#2824

C2

PASS 0230 JAN 15,1972 JAN 15,1972 DAY 015 015

 DSS 41 A.O.S. 015/0430 L.O.S. 015/1300 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

0540-0543-TCP A RELOAD DUE TO ERRONEOUS CMD BLOKS
 0551-0554-SWITCHED TO TCP-B DUE TO CMD PROBLEMS ON "A"
 0634-0636-SWITCHED TO TCP-A DUE TO CMD PROBLEM
 2 WAY TRACK-0735Z-1300Z CMDS XMTD FR 0748Z TO 1245Z

PASS 0231 JAN 15,1972 JAN 15,1972 DAY 015 015

 DSS 62 A.O.S. 015/1230 L.O.S. 015/1930 COMMANDS 180 RANGING NIL
 DEVIATIONS OR ANOMALIES

1323-1939Z 360/758 DOWN LOCKED OUT OF SYST WARM IPL, RESTART
 DR 2839

PASS 0231 JAN 15,1972 JAN 16,1972 DAY 015 016

 DSS 12 A.O.S. 015/1909 L.O.S. 016/0600 COMMANDS 11 RANGING NIL
 DEVIATIONS OR ANOMALIES

2-W TK 1952Z-0600Z
 CMDS XMTD @ 2151Z-0526Z

PASS 0231 JAN 15,1972 JAN 16,1972 DAY 015 016

 DSS 14 A.O.S. 015/1910 L.O.S. 016/0643 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

TELEM TCP 8.1KSNR. TCP 16.2KSNR
 ACTUAL 6.8 ACTUAL 4.0
 PREDICTED 7.3 PREDICTED 4.8
 DIFF-0.5 DIFF-0.8
 1945-LGWR NOT UP DATING- DIS HUNG-UP
 1920Z-DIS RESTART
 1957-1958Z-DIS RELOAD
 2001-DIS LGWR NOT INCRAMENTING
 2228Z-LOS-DIS LGWR NOT INCRAMENTING- NO STATION UNTIL AFTER TR
 ACK

PASS 0231 JAN 16,1972 JAN 16,1972 DAY 016 016

 DSS 41 A.O.S. 016/0524 L.O.S. 016/1300 COMMANDS 8 RANGING NIL
 DEVIATIONS OR ANOMALIES

0530Z-TCP-A RELOAD DUE TO CMD BLOCKS HANG-UP
 0830Z-0905Z- 360/75 DOWN- TRK DATA NOT PROCESSING, CMD SDR NOT
 LOGGING,CANCL R/T JOB, COLD RESTART-DR 2844
 0925Z-0933Z-360/75 DOWN-COMPUTER TIME 2 MINUS SLOW, NEG. RESPO
 NCE FROM MED. ENTRIES, COLD IPL, COLD RESTART DR 2844
 1033Z-1045Z- 360/75 DOWN-NAT TRK WABLE TO ACCESS 360, SWAPPING
 ALL DISC PACKS EXCEPT MSD, COLD IPL, COLD RESTART DR 2844
 2 WAY TRACK-0600Z-1300Z
 CMDS XMTD @-0612Z-1245Z

PASS 0232	JAN 16,1972	JAN 16,1972	DAY 016	016
DSS 62	A.O.S. 016/1230	L.O.S. 016/1930	COMMANDS 150	RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0232	JAN 16,1972	JAN 17,1972	DAY 016	017
DSS 12	A.O.S. 016/1908	L.O.S. 017/0240	COMMANDS 7	RANGING NIL

DEVIATIONS OR ANOMALIES

2121-2206Z 360/75A DOWN-HARDWARE PROBLEM, WARM IPL, SWITCHED T
 0 "B" STRING DR 2845
 0118-0124Z 360/75B DOWN-STRING SWAP"A", WARM IPL NO DR
 0238- LOS 360/75 DOWN FOR IPL
 2 WAY TK 1952-0230Z
 CMDS XMTD @ 2311-0000Z

PASS 0232	JAN 16,1972	JAN 17,1972	DAY 016	017
DSS 14	A.O.S. 016/1909	L.O.S. 017/0423	COMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

TELEM TCP 8.1KSNR	TCP 16.2KSNR
ACTUAL 7.7	ACTUAL 3.5
PREDICTED 8.2	PREDICTED 4.4
DIFFERENCE-0.5	DIFFERENCE-0.9

2121-2206Z 360/75 DOWN HARDWARE PROBLEM/ WARM IPL SWITCHED TO
 "B" DR 2845

PASS 0232	JAN 17,1972	JAN 17,1972	DAY 017	017
DSS 42	A.O.S. 017/0218	L.O.S. 017/1231	COMMANDS 16	RANGING NIL

DEVIATIONS OR ANOMALIES

0329Z-0340Z-CMD ALARM 4/00-0000, REASON UNKNOWN, RELOAD TCP-A,
 DR T-1743
 0643Z-0703Z-LOSS OF DATA, UNABLE TO ACCESS TCP-A, RELOADED,DR
 T-1744
 2 WAY TRACK-0230Z-120Z
 CMDS XMTD @-0241Z-1220Z

PASS 0233	JAN 17,1972	JAN 17,1972	DAY 017	017
DSS 62	A.O.S. 017/1200	L.O.S. 017/1925	COMMANDS 16	RANGING NIL

DEVIATIONS OR ANOMALIES

1850-1831Z LOST HSD DR4553
 1847-1851Z LOST HSD DR4553
 CMD 1234-1910Z
 2 WAY 1233-1915Z

PASS 0233 JAN 17,1972 JAN 18,1972 DAY 017 018

 DSS 12 A.O.S. 017/1904 L.O.S. 018/0445 COMMANDS 9 RANGING NIL
 DEVIATIONS OR ANOMALIES

0012-00212Z -360/75A DOWN FOR IPL, COLD ON WARM; DUE TO RECONF
 IG OF DEVICES IN RECON AREA DR 2850

PASS 0233 JAN 17,1972 JAN 18,1972 DAY 017 018

 DSS 14 A.O.S. 017/1906 L.O.S. 018/0640 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

1905Z TCP "A" DOWN FOR DEVELOPMENT- TCP"B" PROCESS ON 16.2 O
 NLY
 0012Z-0021Z- 360/75A DOWN FOR TCP, COLD ON WARM DUE TO RECONF I
 G OF DEVICES IN RECCN AREA DR 2850
 POST TRACK- 0237Z-0239Z-WB-1 GETTING HITS, FAILURE OF CHANNEL
 SELECT UNIT IN MICROWAVE UNIT, SWITCHED TO WB-2 DR NBR-4556, T
 FR NO-B-04331

PASS 0233 JAN 18,1972 JAN 18,1972 DAY 018 018

 DSS 41 A.O.S. 018/0411 L.O.S. 018/1320 COMMANDS 20 RANGING NIL
 DEVIATIONS OR ANOMALIES

1246Z-1300Z- 360/75A DOWN FOR SCHED. SWAP TO MODE 5, VER 21-3,
 NO DR.
 2 WAY TRACK-0445Z-1320Z
 CMDS XMTD @- 0456Z-0852Z 0935Z-1305Z

PASS 0234 JAN 18,1972 JAN 18,1972 DAY 018 018

 DSS 62 A.O.S. 018/1230 L.O.S. 018/1935 COMMANDS 207 RANGING NIL
 DEVIATIONS OR ANOMALIES

1657-1701Z - LOST DTV; 3100 DOWN DR 2161
 1702-1706Z - LOST DTV; 3100 DOWN DR 2161
 1731-1739Z 360 DOWN REF DR 2855
 1742-1752Z 360 DOWN; COLD IPL WARM RESTART I/O ERROR ON ISD PA
 C DR 2855
 1826-1852Z 360 DOWN; COLD IPL- HARDWARE PROBLEM DR 2856
 2-W TK 1342Z-1935Z
 CMDS XMTD @ 1529Z-1921Z

PASS 0234 JAN 18,1972 JAN 18,1972 DAY 018 018

 DSS 51 A.O.S. 018/1355 L.O.S. 018/1800 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

AOS 1354Z- DATA ON LINE @ 1404Z
 1657-1701Z LOST DTV; 3100 DOWN DR 2161
 1702-1706Z LOST DTV; 3100 DOWN
 1742-1752Z 360 DOWN COLD IPL WARM RESTART I/O ERROR ON LSD PR
 O. DR 2855
 3 WAY TRACK

PASS 0234 JAN 18,1972 JAN 19,1972 DAY 018 019

 DSS 12 A.O.S. 018/1902 L.O.S. 019/0630 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

*TRACK EXTENDED (2-W TK 1957-0630Z) (CMD XMTD @ 2145-0519)
 AOS-1902Z DIS LGWR/LGER/BLRG/HSP TIME INCORRECT EVERY OTHER BS
 N UPDATE
 1941-1943Z REINITIALIZE DIS; DID NOT CAUSE PROBLEM, SUSPECT 36
 0 SOFTWARE DR 0003
 1858-1907Z 360 DOWN, HARDWARE, IPL DR 2856
 2054-2103Z 360 DOWN, COLD IPL, DUMP AND RESTART NAT TRACK UNA-
 BLE TO ACCESS MID PACK, DISPLAY OR UNITE SDR. DR 2858
 2240-2255Z 360 DOWN; 2260 LOCKOUT DR 2861 0113-0118Z 360 DOWN
 -LOCKOUT; RESTART DR 2865

PASS 0234 JAN 18,1972 JAN 19,1972 DAY 018 019

 DSS 14 A.O.S. 018/1903 L.O.S. 019/0640 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP 8.1KSNR	TCP 16.2KSNR
ACTUAL 6.6 -	3.9
PRED. 7.3	4.8
DIFF. -0.7	-0.9

1858-1907Z 360 DOWN; HARDWARE PROBLEM; IPL DR 2856
 2054-2103Z 360 DOWN; COLD IPL, DUMP RESTART DR 2858
 2240-2255Z 360 DOWN, 2260 LOCKED OUT DR 2861
 0113-0118Z 360 DOWN, LOCKED OUT, RESTART DR 2865
 NATTEL DR T-53, N-0004. 360/75A MODEL 5 TLM PROCESS ALARMS
 3 WAY TRACK - NO CMDS.

PASS 0234 JAN 19,1972 JAN 19,1972 DAY 019 019

 DSS 41 A.O.S. 019/0559 L.O.S. 019/1320 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK-0630Z-1320Z
 CMDS XMTD @-0932Z-1315Z

PASS 0235 JAN 19,1972 JAN 19,1972 DAY 019 019

 DSS 62 A.O.S. 019/1230 L.O.S. 019/1920 COMMANDS 233 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK: 1342Z TO 1920 CMD XMIT: 1410Z TO 1841Z
 1351-1403, 360/75 DOWN-LOCKED OUT OF SYSTEM, WARM IPL- WARM RES
 TART, DR 2855
 1425-1458Z 360 DOWN-SCHED SWAP FROM MOD V- NO DR
 1508-1517Z 360 DOWN-RTS POD LOAD PROB, WARM RESTART
 1749-1751Z HSD DOWN-BETWEEN GODDARD AND MADRID, DR 4578, CC AN
 D S UP TO DATE DELAYED
 1647-1920Z MISSING PSEUDO/RESIDUALS

PASS 0235	JAN 19,1972	JAN 20,1972	DAY 019	020
DSS 12	A.O.S. 019/1900	L.O.S. 020/0300	COMMANDS 7	RANGING NIL

DEVIATIONS OR ANOMALIES

1957-2001Z 3100 DOWN, CHANNEL HUNG UP, DR 2861
 2157-2205Z RELOADED TCP- CMD PORTION AT DSS 12, RELOAD REQD.
 0300Z DSS 12 LOS
 1942Z-0230 2 WAY
 1942-0215Z CMDS XMITTED

PASS 0235	JAN 19,1972	JAN 20,1972	DAY 019	020
DSS 14	A.O.S. 019/1902	L.O.S. 020/0417	COMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

1957-2001,3100 DOWN CHANNEL HANG UP DR 2861
 0120- LOSS MONITOR DATA FROM DSS 14. DIS WAS TAKEN FOR VLBI
 C- VBLI TEST-NO VALID TRACKING DATA

PASS 0235	JAN 20,1972	JAN 20,1972	DAY 020	020
DSS 42	A.O.S. 020/0218	L.O.S. 020/1230	COMMANDS 11	RANGING NIL

DEVIATIONS OR ANOMALIES

DR 0011 DOWNLINK EXCEEDED ALLOWABLE TOLERANCE
 POST TRACK- DR T-1782, TFR 51153 LOW SNR AND INTERMITTENT LOSS
 OF DATA FROM 050756Z TO 053334Z DUE TO SOA1 ISO-AMP FAILURE.

PASS 0236	JAN 20,1972	JAN 20,1972	DAY 020	020
DSS 62	A.O.S. 020/1200	L.O.S. 020/1920	COMMANDS 170	RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRK: 1232 TO 1920Z, CMD XMIT 1531 TO 1839Z

PASS 0236	JAN 20,1972	JAN 21,1972	DAY 020	021
DSS 12	A.O.S. 020/1858	L.O.S. 021/0245	COMMANDS 12	RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0236	JAN 20,1972	JAN 21,1972	DAY 020	021
DSS 14	A.O.S. 020/1900	L.O.S. 021/0639	COMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-B-SCI-SNR
 ACTUAL-4.2
 PREDIC-5.2
 DIFFER- -1.0

PASS 0236	JAN 21,1972	JAN 21,1972	DAY 021 021
DSS 41	A.O.S. 021/0214	L.O.S. 021/1310	COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

0311Z-0325Z-360/75 DOWN FOR IPL,WARM START
 OPR SWITCHED DRIVE OFF INSTEAD OF RNG MOD OFF AT 0955Z DOWNLIN
 K GLITCHED FOR 12 SECS S/C REMAINED 2 WAY DR 41/032 T-1785
 D/L AND ENG SNR EXCEEDED ALLOWABLE LEVELS DR N-0015
 2 WAY TRACK 0955Z-1300Z
 CMDS XMTD 0322Z-0955Z 1008Z-1245Z
 1046Z HSD STREAM NO 1 FAILED,SWITCH TO BACKUP

PASS 0237	JAN 21,1972	JAN 21,1972	DAY 021 021
DSS 62	A.O.S. 021/1230	L.O.S. 021/1915	COMMANDS 341 RANGING NIL

DEVIATIONS OR ANOMALIES

1855-1903Z 360/75A DOWN; DDA HANG-UPS RESTART REQ DR 2830
 2-W TK 1322Z-1915Z CMDS XMTD 1429Z-1842Z

PASS 0237	JAN 21,1972	JAN 22,1972	DAY 021 022
DSS 12	A.O.S. 021/1855	L.O.S. 022/0530	COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

0532Z DSS 12 LOS
 1937Z-0530 2 W
 1937Z-0525 CMD XMITTED

PASS 0237	JAN 21,1972	JAN 22,1972	DAY 021 022
DSS 14	A.O.S. 021/1858	L.O.S. 022/0639	COMMANDS N/A RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-B-SCISNR
 ACTUAL- 4.4
 PREDIC- 5.2
 DIFFER -0.8

PASS 0237	JAN 22,1972	JAN 22,1972	DAY 022 022
DSS 41	A.O.S. 022/0541	L.O.S. 022/1300	COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

CHAR BIAS AND NOISE N/A DUE TO RFS FREE RUN TEST
 0603-0613Z HSLD DOWN-GSFC PROBLEM
 0801-0812Z 360 DOWN-STRING SWAP. A TO B SYST SCHEDULED
 1117-1124Z HSDL DOWN
 1135Z-DSN FMTS(OTV) NOT UPDATING HSDL PROBLEM
 1754Z-1210Z 360 DOWN COLD RESTART DR 2890

PASS 0238	JAN 22,1972	JAN 22,1972	DAY 022 022
DSS 62	A.O.S. 022/1243	L.O.S. 022/1900	COMMANDS 394 RANGING NIL

DEVIATIONS OR ANOMALIES

SWITCHED TO TCPB 1814Z TO CHECK OUT HSD SYNCRONIZE 2 TCPB ENG
 BAD SWITCHED BACK TO TCPA 1842Z UNABLE TO VALIDATE HSD SYNCRON
 IZER 2 THIS WAS DONE AT PROJECT'S REQUEST
 1804Z-2100Z STOPPED UPDATE
 1818Z-1824Z 360/75 DOWN FOR JOB RESTART DR 2848
 1826Z-1833Z 360/75 DOWN LOCKED OUT OF SYSTEM COLD IPL/WARM RES
 TART DR 2848
 2-WAY TRK 1343-1855Z CMDS XMTD 1405-1837Z

PASS 0238	JAN 22,1972	JAN 23,1972	DAY 022 023
DSS 12	A.O.S. 022/1851	L.O.S. 023/0630	COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

2257Z-2303Z 360/75 DOWN
 0608Z-0625Z 360 DOWN IPL WARM RESTART DR 2899
 2 WAY TRK CMD

PASS 0238	JAN 22,1972	JAN 23,1972	DAY 022 023
DSS 14	A.O.S. 022/1855	L.O.S. 023/0638	COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCPB-SCISNR	TCPB-SCI
ACTUAL-7.5	ACTUAL-8.0
PREDIC-7.7	PREDIC-8.4
DIFFER- -0.2	DIFFER- -0.4
2257Z-2303Z 360 DOWN	
0608Z-0675Z 360 DOWN IPL WARM RESTART DR 2899	

PASS 0238	JAN 23,1972	JAN 23,1972	DAY 023 023
DSS 41	A.O.S. 023/0554	L.O.S. 023/1320	COMMANDS 13 RANGING NIL

DEVIATIONS OR ANOMALIES

0608-0625Z 360 DOWN IPL WARM RESTART DR 2899
 0733-0742Z 360 DOWN FOR SCHEDULED STRING SWAP
 2 WAY 0630-1320Z
 CMD 0641-1305Z

PASS 0239	JAN 23,1972	JAN 23,1972	DAY 023 023
DSS 62	A.O.S. 023/1230	L.O.S. 023/1915	COMMANDS 276 RANGING NIL

DEVIATIONS OR ANOMALIES

2-W TRK 1343Z-1915Z
 CMDS XMTD 1430-1701Z

PASS 0239	JAN 23,1972	JAN 24,1972	DAY 023 024
DSS 12	A.O.S. 023/1851	L.O.S. 024/0500	COMMANDS 26 RANGING NIL
DEVIATIONS OR ANOMALIES			
DIS RELOADED AT AOS DUE LGWR NOT LOGGING			

PASS 0239	JAN 23,1972	JAN 24,1972	DAY 023 024
DSS 14	A.O.S. 023/1853	L.O.S. 024/0637	COMMANDS 15 RANGING NIL
DEVIATIONS OR ANOMALIES			
ACTUAL- 7.7 PREDIC- 8.2 DIFFER- -.8 2-WAY TRK 0450Z-0625Z			

PASS 0239	JAN 24,1972	JAN 24,1972	DAY 024 024
DSS 41	A.O.S. 024/0559	L.O.S. 024/1315	COMMANDS 11 RANGING NIL
DEVIATIONS OR ANOMALIES			
0713-0719Z 360 DOWN IPL WARM RESTART 0848-0902Z 360 DOWN IPL WARM RESTART DR 2900 0931-0937Z 360 DOWN COLD IPL COLD RESTART 2901 1237-1250Z 360 DOWN COLD IPL COLD RESTART 2902 2 WAY 0630-1305Z CMD 0641-1300Z			

PASS 0240	JAN 24,1972	JAN 24,1972	DAY 024 024
DSS 62	A.O.S. 024/1230	L.O.S. 024/1945	COMMANDS 231 RANGING NIL
DEVIATIONS OR ANOMALIES			
TCPA-SCISNR ACTUAL- 4.1 PREDIC- 5.7 DIFFER- -1.6 1237Z-1250Z 360/75 DOWN COLD IPL COLD RESTART DR 2902 2 WAY TRK 1328Z-1825Z CMDS XMITTED 1223Z-1828Z			

PASS 0240	JAN 24,1972	JAN 25,1972	DAY 024 025
DSS 12	A.O.S. 024/1847	L.O.S. 025/0305	COMMANDS 20 RANGING NIL
DEVIATIONS OR ANOMALIES			
1840Z-1908Z GOULD A800 H/C OFF-LINE FOR MAINT 2209Z-2216Z 360/75 DOWN DUE TO TLM PROCESS HANG-UP DR 2906 0206Z DSS 12 LOS			

PASS 0240	JAN 24,1972	JAN 25,1972	DAY 024 025	

DSS 14	A.O.S. 024/2024	L.O.S. 025/0446	COMMANDS 0	RANGING NIL

DEVIATIONS OR ANOMALIES

TCPB-SCISNR
 ACTUAL 7.9
 PREDIC 8.4
 DIFFER -0.5
 1840-1408Z GOULD 4800 H/C OFF-LINE FOR MAINT
 LATE AOS DUE TO ANTENNA PROBLEMS DR T-1791
 2209-2216Z 360/75 DOWN DUE TO TLM PROCESS HUNG-UP RESTART
 DR2906
 0120 DIS SCHEDULED DOWN FOR DSIF VLBI

PASS 0240	JAN 25,1972	JAN 25,1972	DAY 025 025	

DSS 42	A.O.S. 025/0207	L.O.S. 025/1219	COMMANDS 16	RANGING NIL

DEVIATIONS OR ANOMALIES

TCPB-ENG SNR
 ACTUAL- 5.6
 PREDIC- 6.2
 DIFFER- -.6
 0623-0628Z 360/75 DOWN SCH RESTART NO DR
 NO DIS

PASS 0241	JAN 25,1972	JAN 25,1972	DAY 025 025	

DSS 62	A.O.S. 025/1130	L.O.S. 025/1905	COMMANDS 214	RANGING NIL

DEVIATIONS OR ANOMALIES

1333Z-1339Z-360/75 DOWN, SKED, COLD IPL/WARM RESTART NO DR
 2-W TK 1233Z-1905Z
 CMDS XMTD 1429Z-1631Z

PASS 0241	JAN 25,1972	JAN 26,1972	DAY 025 026	

DSS 12	A.O.S. 025/1845	L.O.S. 026/0500	COMMANDS 15	RANGING NIL

DEVIATIONS OR ANOMALIES

0257Z TCP A RELOAD DUE TO ODR RUN AWAY

PASS 0241	JAN 25,1972	JAN 26,1972	DAY 025 026	

DSS 14	A.O.S. 025/1849	L.O.S. 026/0636	COMMANDS 2	RANGING MU

DEVIATIONS OR ANOMALIES

TCPB-SCI SNR	TCPB-SCI SNR
ACTUAL- 4.7	ACTUAL- 3.3
PREDIC- 5.4	PREDIC- 3.8
DIFFER- -.7	DIFFER- -.5
0514Z-0636Z 2 WAY 0514Z-0630Z CMDS XMITTED	

PASS 0241	JAN 26,1972	JAN 26,1972	DAY 026	026
DSS 41	A.O.S. 026/0553	L.O.S. 026/1315	COMMANDS 15	RANGING NIL
DEVIATIONS OR ANOMALIES				
BIAS AND NOISE N/A DUE TO RFS TEST				

PASS 0242	JAN 26,1972	JAN 26,1972	DAY 026	026
DSS 62	A.O.S. 026/1230	L.O.S. 026/1925	COMMANDS 196	RANGING NIL
DEVIATIONS OR ANOMALIES				
1251-1300Z 360 DOWN COLD IPL WARM RESTART				
2-W TK 1328-1925Z				
CMDS XMTD 1430-1915Z				

PASS 0242	JAN 26,1972	JAN 26,1972	DAY 026	026
DSS 51	A.O.S. 026/1354	L.O.S. 026/1800	COMMANDS 0	RANGING NIL
DEVIATIONS OR ANOMALIES				
3-WAY PASS WITH DSS-62				

PASS 0242	JAN 26,1972	JAN 27,1972	DAY 026	027
DSS 12	A.O.S. 026/1843	L.O.S. 027/0420	COMMANDS 10	RANGING NIL
DEVIATIONS OR ANOMALIES				
EARLY LOS TO ALLOW MORE RANGING TIME AT DSS-14 EARLY 2 WAY XFER				
1945Z-2004Z 360/75 DOWN SCHED SYSTEM SWAP NO DR				
2026Z-2030Z CDC 3100 DOWN RESTART REQ DR 2761				
0147Z-0158Z 360/75 DOWN 1052'S LOCKED OUT WARM IPL RESTART REQ DR 2761				
0147Z-0158Z 360/75 DOWN-1052'S LOCKED OUT WARM IPL RESTART DR 2925				
2 WAY TRACK 1925Z-0420Z CMDS XMTD 1936Z-0415Z				

PASS 0242	JAN 26,1972	JAN 27,1972	DAY 026	027
DSS 14	A.O.S. 026/1846	L.O.S. 027/0634	COMMANDS 2	RANGING MU
DEVIATIONS OR ANOMALIES				
TCPA-ENG SNR	TCPA-ENG SNR	TCPB-SCI SNR	TCPB-SCI SNR	
ACTUAL-11.2	ACTUAL- 9.2	ACTUAL- 7.8	ACTUAL- 5.4	
PREDIC-11.7	PREDIC- 9.4	PREDIC- 8.2	PREDIC- 5.9	
DIFFER- -.5	DIFFER- -.2	DIFFER- -.4	DIFFER- -.5	
2003Z-APS DRIVE GLITH REF T-1799				
1945Z-2004Z 360/75 DOWN FOR SCHED SYSTEM SWAP NO DR				
2026Z-2030Z CDC 3100 DOWN RESTART REQ DR 2761				
0147Z-0158Z 360/75 1052'S LOCKED OUT WARM IPL RESTART DR 2925				
0217Z-0219Z LOST HSD BAD SYNC AT 360/75				
2 WAY TRACK 0420Z-0630Z				
CMDS XMTD 0421Z-0625Z				

PASS 0242 JAN 27,1972 JAN 27,1972 DAY 027 027

DSS 41 A.O.S. 027/0600 L.O.S. 027/1315 COMMANDS 18 RANGING NIL

DEVIATIONS OR ANOMALIES

0610Z TCPA CMD CONFRIM PROBLEM-RELOAD REQ NO DR
0747Z DIS RELOAD UNABLE TO REVIEW ON LINE PRINTER AND MAG
PACK NO DR
0852Z-0904Z 360 DOWN CANCELLED R.T. JOB STEP NO DR
0848Z-0914Z HSD DOWN STATION TO CANBERRA LINE WAS SWITCHED
TO BACK UP DR 4641
2 WAY 0630-1305Z

PASS 0243 JAN 27,1972 JAN 27,1972 DAY 027 027

DSS 62 A.O.S. 027/1242 L.O.S. 027/1940 COMMANDS 191 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 1328Z-1940Z
CMDS XMIT 1430Z-1926Z
NO DIXFER TEST STATION NOT READY
1242 AOS STATION 12 MIN LATE AS PER TRACK CHF NO DR
1855-1902Z 3100 DOWN RESTART REQ NO DR
1910-1936Z 360 DOWN IPL REQ ALL DEVICES LOCKED OUT NO DR

PASS 0243 JAN 27,1972 JAN 28,1972 DAY 027 028

DSS 12 A.O.S. 027/1842 L.O.S. 028/0430 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

RX 1AGC
ACTUAL 153.7
PREDIC 153.0
DIFFER -0.7
EARLY LOS 2 WAY XFER TO ALLOW MORE RANGING TIME AT DSS 14
1855Z-1902Z 3100 DOWN RESTART REQ NO DR
1910Z-1916Z 360 DOWN IPL REQ ALL DEVICES LOCKED OUT NO DR
2215Z-0022Z LOST ODR LOG WRITE CAPABILITY RELOAD REQ DELAYED
DUE CMDING ACTIVITY, TCP-A RELOADED 0026Z REF DR T 1800
POST TRACK TCP TAPE DATA LOST, MAG TAPE UNIT TRANS ORT FAIL-
URE, PROGRAM RELOAD, TFR 804416 DR T-1800
2 WAY TRACK 1940Z-0421Z
CMDS XMTD 1951Z-0415Z

PASS 0243 JAN 27,1972 JAN 28,1972 DAY 027 028

DSS 14 A.O.S. 027/1844 L.O.S. 028/0634 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1,2AGC	TCP-A-ENG SNR	TCP-B-SCI SNR
ACTUAL 146.2	ACTUAL 7.5	ACTUAL 6.9
PREDIC 145.2	PREDIC 7.8	PREDIC 7.3
DIFFER -0.4	DIFFER -0.3	DIFFER -1.1
TCP-B-SCI SNR	TCP-B-SCI SNR	
ACTUAL 4.4	ACTUAL 3.4	
PREDIC 5.1	PREDIC 4.3	
DIFFER -0.7	DIFFER 136.2	
1855-1902Z 3100 DOWN RESTART REQ NO DR		
1910-1916Z 360 DOWN IPL REQ ALL DEVICES LOCKED OUT NO DR		
0415-0420Z SMT DIPLEX WG SW HUNG UP. RECYCLED SW BY PWR		
REMOVAL DR 1801. 2-WAY TRACK 0421-0625Z CMDS XMTD 0422-0620Z		

PASS 0243 JAN 28,1972 JAN 28,1972 DAY 028 028

 DSS 41 A.O.S. 028/0600 L.O.S. 028/1315 COMMANDS 11 RANGING NIL
 DEVIATIONS OR ANOMALIES

0752Z-0758Z 360 DOWN CMD SDR LOG PROB IPL RESTART DR 2902
 0815Z-0822Z 360 DOWN CMD SDR LOG PROB COLD IPL COLD RESTART
 DR 2902
 1252Z-1312Z 360 DOWN CONTINUOUS DOA ADMINS
 2 WAY 0635Z-1305Z
 CMDS 0640-1300Z

PASS 0244 JAN 28,1972 JAN 28,1972 DAY 028 028

 DSS 62 A.O.S. 028/1230 L.O.S. 028/1930 COMMANDS 192 RANGING NIL
 DEVIATIONS OR ANOMALIES

1329Z-1930Z 2 WAY
 1252Z-1312Z 360 DOWN WARM IPL-WARM REAL TIME RELOAD DR 2934
 1655Z-1657Z LOST HSD FROM DSS 62
 1745Z-1758Z 360/75 DOWN COLD IPL
 1838Z-1854Z 360/75 DOWN COLD IPL-WARM START
 GOULD 4800 DOWN FOR ENTIRE PASS. TROUBLE CAN BE SEEN BY LOOK-
 ING AT OTV HARD COPY

PASS 0244 JAN 28,1972 JAN 29,1972 DAY 028 029

 DSS 14 A.O.S. 028/1841 L.O.S. 029/0633 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

RX 1,2AGC	TCP-A-ENG SNR	TCP-B-SCI SNR	TCP-B-SCI SNR
ACTUAL 145.9	ACTUAL 10.6	ACTUAL 7.6	ACTUAL 4.2
PREDIC 144.9	PREDIC 10.6	PREDIC 7.2	PREDIC 4.8
DIFFER -1.0	DIFFER 0	DIFFER +0.4	DIFFER -0.6

TCP-B-SCI SNR
 PREDIC 7.2
 DIFFER 0
 1838Z-1854Z 360/75 DOWN, COLD IPL, WARM RESTART
 2011Z-2017Z 360/75 DOWN, IPL, COLD RESTART DR C-096
 0610Z-0618Z TCP-B PROGRAM HALT, RELOAD REQ REF DR T-1804
 2139Z BIT RATE CHANGE ENTERED IN ERROR BY SOD REF DR T-1802
 3/1 WAY TRACK, NO CMDS

PASS 0244 JAN 28,1972 JAN 29,1972 DAY 028 029

 DSS 12 A.O.S. 028/1844 L.O.S. 029/0500 COMMANDS 9 RANGING NIL
 DEVIATIONS OR ANOMALIES

1838-1854Z 360/75 DOWN COLD IPL WARM RESTART
 2011-2017Z 360/75 DOWN COLD RESTART DR C-096
 2-WAY TRACK 1930-0500Z CMDS XMTD AT 1940-0435Z

PASS 0244 JAN 29,1972 JAN 29,1972 DAY 029 029

 DSS 41 A.O.S. 029/0554 L.O.S. 029/1315 COMMANDS 8 RANGING NIL
 DEVIATIONS OR ANOMALIES

0608Z CMD VERIFICATION PROB. TCP-A RELOAD NO DR
 1300Z LDS 360/75 DOWN, HARDWARE PROB. STRING SWAP
 MOST OF PASS TRACKING MODE WAS 1-WAY

PASS 0245 JAN 29,1972 JAN 29,1972 DAY 029 029

 DSS 62 A.O.S. 029/1208 L.O.S. 029/1930 COMMANDS 188 RANGING NIL
 DEVIATIONS OR ANOMALIES

1300Z-1328Z 360/75 DOWN, HARDWARE PROB. STRING SWAP
 1619Z-1626Z 360/75 DOWN-OUTPUT HUNG UP NO DR
 1800Z-1804Z 360/75 DOWN-RESTART DR 2333

PASS 0245 JAN 29,1972 JAN 30,1972 DAY 029 030

 DSS 12 A.O.S. 029/1839 L.O.S. 030/0500 COMMANDS 12 RANGING NIL
 DEVIATIONS OR ANOMALIES

RX 1 AGC
 ACTUAL 153.1
 PREDIC 1 3.0
 DIFFER -0.1
 2 WAY 1954Z-0500Z CMDS XMIT 2242Z TO 0350Z 2229Z-2235Z
 360/75 DOWN, COLD IPL-COLD RESTART DR 2902

PASS 0245 JAN 29,1972 JAN 30,1972 DAY 029 030

 DSS 14 A.O.S. 029/1840 L.O.S. 030/0633 COMMANDS 2 RANGING MU
 DEVIATIONS OR ANOMALIES

RX 1,2AGC	RX 1,2AGC	TCPA-ENG SNR	TCPA-ENG SNR
ACTUAL 146.0	ACTUAL 145.2	ACTUAL 7.3	ACTUAL 10.7
PREDIC 146.0	PREDIC 144.9	PREDIC 7.4	PREDIC 11.7
DIFFER 0	DIFFER -0.3	DIFFER -0.1	DIFFER -1.0
TCPB-SCI SNR	TCPB-SCI SNR	TCPB-SCI SNR	TCPB-SCI SNR
ACTUAL 3.7	ACTUAL 6.9	ACTUAL 3.2	ACTUAL 7.9
PREDIC 4.7	PREDIC 8.1	PREDIC 3.9	PREDIC 8.5
DIFFER -1.0	DIFFER -1.2	DIFFER -0.7	DIFFER -0.4

2 WAY 0450Z-0620Z
 CMDS XMIT 0505Z AND 0615Z
 UNABLE TO PERFORM DATA XFER DUE TO SCA PROBS DR 1805
 2229Z-2235Z 360 DOWN COLD IPL AND COLD START DR 2905

PASS 0245 JAN 30,1972 JAN 30,1972 DAY 030 030

 DSS 41 A.O.S. 030/0556 L.O.S. 030/1315 COMMANDS 8 RANGING NIL
 DEVIATIONS OR ANOMALIES

26 MIN LATE ACQ UNKNOWN
 2 WAY FK 0644Z-1305Z
 CMDS XMTD 1033Z-1217Z

PASS 0246 JAN 30,1972 JAN 30,1972 DAY 030 030

DSS 62 A.O.S. 030/1230 L.O.S. 030/1930 COMMANDS 173 RANGING NIL
DEVIATIONS OR ANOMALIES

AOS-LOS NO DIS; DUE TO SKIP FUNCTION FAIL UNABLE TO LOAD MON-
ITOR PROGRAM REF. TFR 02359 DR T1806

PASS 0246 JAN 30,1972 JAN 31,1972 DAY 030 031

DSS 12 A.O.S. 030/1837 L.O.S. 031/0500 COMMANDS 9 RANGING NIL
DEVIATIONS OR ANOMALIES

ERRONEOUS DIS LGWR, LGER AND BLRC READINGS ON DIS ONCE EVERY
MINUTE DR N-0042
2233Z CMDING PROBLEMS TCP-A RELOAD REQ REF DR T-1808
0133Z DIS RELOADED REF DR N-0042
190JZ TDH EXC VCD FIELD INTERMITTENTLY STOWS ZERO'S IN 4 MOST
SIG. DIGITS DR T-1807
2 WAY TRACK 1930Z-0420Z
CMDS XMTD 1945Z-J415Z

PASS 0246 JAN 30,1972 JAN 31,1972 DAY 030 031

DSS 14 A.O.S. 030/1838 L.O.S. 031/0632 COMMANDS 2 RANGING MU
DEVIATIONS OR ANOMALIES

TCP-B-SCI SNR
ACTUAL 7.5
PREDIC 8.1
DIFFER +0.2
0209Z DIS MONITOR PROGRAM RELOADED NO DR
2 WAY TRACK 0420Z-0625Z CMDS XMTD 0425Z-0610Z

PASS 0246 JAN 31,1972 JAN 31,1972 DAY 031 031

DSS 41 A.O.S. 031/0551 L.O.S. 031/1305 COMMANDS 10 RANGING NIL
DEVIATIONS OR ANOMALIES

J722Z-J724Z LOST HYDROLOGICS ON APS, SWAPPED TO BACK UP SYSTEM
DR T-1809
2 WAY TRACK 0649Z-0721Z 0803Z-1305Z
CMDS XMTD J813Z-1152Z

PASS 0247 JAN 31,1972 JAN 31,1972 DAY 031 031

DSS 62 A.O.S. 031/1231 L.O.S. 031/2030 COMMANDS 204 RANGING NIL
DEVIATIONS OR ANOMALIES

2 WAY TRACK 1305 TO 2030
CMD XMIT 1430 TO 1900
2010Z-2023Z, 3100Z DCWN, CIC HANG UP THROUGH 360/75 INTERFACE
DR 2959

PASS 0247 JAN 31,1972 JAN 31,1972 DAY 031 031

 DSS 51 A.O.S. 031/1355 L.O.S. 031/1500 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES
 2 WAY TRACK UNAVAILABLE

PASS 0247 JAN 31,1972 FEB 01,1972 DAY 031 032

 DSS 14 A.O.S. 031/1835 L.O.S. 032/0631 COMMANDS 2 RANGING MU
 DEVIATIONS OR ANOMALIES
 TCP-B-SCI
 ACTUAL 4.0
 PREDIC 4.6
 DIFFER -0.6
 0150Z-0159Z 360/75 DOWN-LOCKED OUT, WARM IPL AND RESTART DR-
 2962
 2 WAY TRACK 0420Z-0625Z
 CMDS XMTD 0425Z-0610Z

PASS 0247 JAN 31,1972 FEB 01,1972 DAY 031 032

 DSS 12 A.O.S. 031/2000 L.O.S. 032/0430 COMMANDS 8 RANGING NIL
 DEVIATIONS OR ANOMALIES
 0150Z-0159Z 360/75 DOWN-LOCKED OUT, WARM IPL, RESTART DR 2962
 2 WAY TRACK 2030Z-0420Z
 CMDS XMTD 2040Z-0415Z

PASS 0247 FEB 01,1972 FEB 01,1972 DAY 032 032

 DSS 41 A.O.S. 032/0551 L.O.S. 032/1305 COMMANDS 15 RANGING NIL
 DEVIATIONS OR ANOMALIES
 1017Z-1025Z 360/75 DOWN, DUE TO TLM PROCESS PROBLEMS; RESTART
 DR 2964
 1244Z-1255Z 360/75 DOWN, FOR VERSION CHANGE TO 24.2 NO DR
 2 WAY TRACK 0649Z-1305Z
 CMDS XMITED 0857Z-1209Z

PASS 0247 FEB 01,1972 FEB 01,1972 DAY 032 032

 DSS 42 A.O.S. 032/0859 L.O.S. 032/1100 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES
 1017Z-1025Z 360/75 DOWN, DUE TO TLM PROCESS NOT PROCESSING
 RESTART NO DR

PASS 0248 FEB 01,1972 FEB 01,1972 DAY 032 032

 DSS 62 A.O.S. 032/1230 L.O.S. 032/2030 COMMANDS 231 RANGING NIL
 DEVIATIONS OR ANOMALIES

2 WAY TRACK 1329Z-2030Z
 CMD XMIT 1429Z-1909Z
 1328Z-1331Z DIS DOWN, RELOAD DUE TO BLOWN FUSE TFR-802365

PASS 0248 FEB 01,1972 FEB 02,1972 DAY 032 033

 DSS 14 A.O.S. 032/1833 L.O.S. 033/0630 COMMANDS 2 RANGING MU
 DEVIATIONS OR ANOMALIES

TCP-B-SCI SNR
 ACTUAL 4.0
 PREDIC 4.7
 DIFFER .7
 2 WAY TRACK 0420Z-0625Z
 CMDS XMTD 0425Z-0610Z

PASS 0248 FEB 01,1972 FEB 02,1972 DAY 032 033

 DSS 12 A.O.S. 032/2000 L.O.S. 033/0430 COMMANDS 12 RANGING NIL
 DEVIATIONS OR ANOMALIES

0044Z-0129Z 360 DOWN-LOCKED OUT, WARM IPL AND RESTART, FAIL-
 ED, RE-IPL DR 2969
 210517Z-211200Z TXR FAILURE (KLYSTRON-FAILURE) DR T-1810
 TFR 804426
 2 WAY TRACK 2030Z-0420Z
 CMDS XMTD 2041Z-0415Z

PASS 0248 FEB 02,1972 FEB 02,1972 DAY 033 033

 DSS 41 A.O.S. 033/0559 L.O.S. 033/1300 COMMANDS 14 RANGING NIL
 DEVIATIONS OR ANOMALIES

0707Z-0718Z 360/75 DOWN LOCKED OUT, WARM IPL AND RESTART
 DR 2969
 1235Z-1246Z 360/75 DOWN, LOCKED OUT, R-DUMP REQUIRED RESTART
 DR 2971
 2 WAY TRACK 0649-1300Z
 CMDS XMTD 0944Z-1212Z

PASS 0249 FEB 02,1972 FEB 02,1972 DAY 033 033

 DSS 62 A.O.S. 033/1230 L.O.S. 033/2030 COMMANDS 216 RANGING NIL
 DEVIATIONS OR ANOMALIES

2 WAY TRACK 1324Z-2030Z CMD XMIT 1430Z TO 1631Z
 1235Z-1246Z 360/75 DOWN, LOCKED OUT, R-DUMP REQ RESTART DR2971
 1353Z-1407Z 360/75 DOWN, LOCKED OUT, RESTART COLD IPL,
 REF: DR 2971

PASS 0249	FEB 02,1972	FEB 03,1972	DAY 033	034
DSS 14	A.O.S. 033/1830	L.O.S. 034/0625	COMMANDS 3	RANGING MU
DEVIATIONS OR ANOMALIES				
RX 1,2 AGC	TCP-A-ENG SNR	TCP-B-SCI SNR		
ACTUAL 146.7	ACTUAL 6.5	ACTUAL 7.0		
PREDIC 145.1	PREDIC 6.7	PREDIC 7.6		
DIFFER -1.6	DIFFER -0.2	DIFFER -0.6		
TCP-B-SCI SNR	TCP-B-SCI SNR			
ACTUAL 4.1	ACTUAL 2.7			
PREDIC 4.8	PREDIC 3.3			
DIFFER -0.7	DIFFER -0.6			
0408Z-0426Z 360 DOWN, SCHEDULE IPL AND RESTART				

PASS 0249	FEB 02,1972	FEB 03,1972	DAY 033	034
DSS 12	A.O.S. 033/2000	L.O.S. 034/0430	COMMANDS 10	RANGING NIL
DEVIATIONS OR ANOMALIES				
2127Z-2133Z DSS 12 TRANSMITTER KICKED OFF CAUSING 35 MIN DE- LAY IN TRANSMISSION OF DSS-57 CMD DR T-1811 2 WAY 2040Z-0415Z CMD 2045Z-0420				

PASS 0249	FEB 03,1972	FEB 03,1972	DAY 034	034
DSS 41	A.O.S. 034/0552	L.O.S. 034/1300	COMMANDS 14	RANGING NIL
DEVIATIONS OR ANOMALIES				
0822Z-0845Z 360/75 DOWN FOR SKED STRING SWAP TO "B" STRING 2 WAY TRACK 0649Z-1300Z CMDS XMTD 1030Z-1213Z				

PASS 0250	FEB 03,1972	FEB 03,1972	DAY 034	034
DSS 62	A.O.S. 034/1230	L.O.S. 034/2030	COMMANDS 177	RANGING NIL
DEVIATIONS OR ANOMALIES				
1937Z-1943Z 360/75 DOWN DR 2999				

PASS 0250	FEB 03,1972	FEB 04,1972	DAY 034	035
DSS 14	A.O.S. 034/1828	L.O.S. 035/0629	COMMANDS 2	RANGING MU
DEVIATIONS OR ANOMALIES				
RX 1,2 AGC	TCP-A-ENG SNR	TCP-B-SCI SNR		
ACTUAL 145.9	ACTUAL 11.1	ACTUAL 2.7		
PREDIC 145.2	PREDIC 10.0	PREDIC 3.7		
DIFFER -0.7	DIFFER +0.1	DIFFER -1.0		
TCP-B-SCI SNR	TCP-B-SCI SNR			
ACTUAL 7.5	ACTUAL 3.7			
PREDIC 8.0	PREDIC 4.4			
DIFFER -0.5	DIFFER -0.7			
1937Z TO 1943Z 360 DOWN DR 2999 0019Z-0031Z DIS RELOAD				

0052Z-0106Z 360 DOWN, FORCE R-DUMP DR 3000
 0012Z-0028Z 360 DOWN, RELOAD DR 3000
 0224Z-0246Z 360 DOWN, BACKLOG, CONTINUED ADMINS. IPL DR3000
 0328Z-0343Z 360 DOWN, LOCKED OUT RT JOB STEP DR 3000
 0411Z-0417Z 360 DOWN, WARM RESTART DR 3000
 0402Z-0406Z 360 DOWN, RELOAD DR 3000
 2 WAY TRACK 0521Z-0629Z
 CMDS XMITD 0515Z-0601Z

PASS 0250 FEB 03,1972 FEB 04,1972 DAY 034 035

DSS 12 A.O.S. 034/2000 L.O.S. 035/0422 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

DIS DOWN 2000Z-2127Z. UNABLE TO ACCESS PROGRAM
 0057Z-0166Z 360 DOWN, FORCE R-DUMP TO GET BACK DR 3000
 0017Z-0028Z 360 DOWN, RELOAD REQ. DR 3000
 0224Z-0246Z 360 DOWN, BACKLOG-CONTINUS ADMINS. IPL DR 3000
 0328Z-0343Z 360 DOWN, LOCKED OUT RT JOB STEP DR 3000
 0411Z-0417Z 360 DOWN, WARM RESTART DR 3000
 0153Z- EOT-NO PSEUDO/RESIDUALS
 2 WAY TRACK 2055Z-0420Z
 CMDS XMTD 2257Z-0408Z

PASS 0250 FEB 04,1972 FEB 04,1972 DAY 035 035

DSS 41 A.O.S. 035/0557 L.O.S. 035/1300 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

0602Z TCP RELOAD
 0758Z-0813Z 360/75 B DOWN, PROCESS STOPPED, LOCKED DR 3000
 0936Z-0952Z 360/75 B DOWN, LOCKED OUT ADMIN. COLD IPL DR 3000
 2 WAY TRACK 0634Z-1255Z
 CMDS XMITD 1029Z-1225Z

PASS 0251 FEB 04,1972 FEB 04,1972 DAY 035 035

DSS 62 A.O.S. 035/1230 L.O.S. 035/2030 COMMANDS 209 RANGING NIL

DEVIATIONS OR ANOMALIES

1321Z-1330Z 360/75B DOWN, DUE TO NAT TRACK PROBLEMS, COLD IPL
 DR 3005
 2 WAY TRACK 1255Z-2030Z
 CMDS XMTD 1310Z-2015Z

PASS 0251 FEB 04,1972 FEB 05,1972 DAY 035 036

DSS 14 A.O.S. 035/1826 L.O.S. 036/0628 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1,2AGC	RX 1,2 AGC	TCP-A-ENG SNR
ACTUAL 145.5	ACTUAL 145.2	ACTUAL 11.5
PREDIC 145.2	PREDIC 145.2	PREDIC 11.3
DIFFER -0.3	DIFFER 0.0	DIFFER +0.2
TCP-A-ENG SNR	TCP-B-SCI SNR	TCP-B-SCI SNR
ACTUAL 10.9	ACTUAL 2.6	ACTUAL 2.6
PREDIC 10.8	PREDIC 3.7	PREDIC 3.7
DIFFER +0.1	DIFFER -1.1	DIFFER -1.1

TCP-B-SCI	TCP-B-SCI SNR
ACTUAL 3.7	ACTUAL 7.3
PREDIC 4.6	PREDIC 7.9
DIFFER -0.9	DIFFER -0.6

0003Z-0018Z 360 DOWN FORCE R-DUMP DR 3009
 0508Z-0523Z 360 DOWN WARM IPL, WARM RESTART DR 3010
 2 WAY 0415Z-0626Z
 CMD 0430Z-0605Z

PASS 0251 FEB 04,1972 FEB 05,1972 DAY 035 036

DSS 12 A.O.S. 035/2000 L.O.S. 036/0430 COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

0003Z-0018Z 360 DOWN- FORCE R-DUMP DR 3009
 2 WAY 2030Z-0415Z
 CMDS 2041Z-0410Z

PASS 0251 FEB 05,1972 FEB 05,1972 DAY 036 036

DSS 41 A.O.S. 036/0556 L.O.S. 036/1500 COMMANDS 13 RANGING NIL

DEVIATIONS OR ANOMALIES

0612Z-RELOAD TCP-A
 1015Z-1027Z 360/75 DOWN-HUNG UP, NO REASON GIVEN DR 3011
 1300 LOS DSS 41-HSD FOR OTV REMOVED BEFORE LAST RECORDINGS
 WERE RECORDED

PASS 0252 FEB 05,1972 FEB 05,1972 DAY 036 036

DSS 62 A.O.S. 036/1233 L.O.S. 036/2030 COMMANDS 193 RANGING NIL

DEVIATIONS OR ANOMALIES

1750Z-1824Z- 360/75B DOWN, REPLACE HS PTR PART NO DR
 1931Z-1956Z 360/75B DOWN, LOCKED OUT, CANX R/T JOB, FORCE
 R-DUMP DR 3015
 2 WAY TRACK 1255Z-2030Z
 CMDS XMTD 1310Z-2015Z

PASS 0252 FEB 05,1972 FEB 06,1972 DAY 036 037

DSS 14 A.O.S. 036/1824 L.O.S. 037/0625 CCMMANDS 2 RANGING NIL

DEVIATIONS OR ANOMALIES

RX 1,2 AGC	TCP-B-ENG SNR	TCP-A-SCI SNR
ACTUAL 146.3	ACTUAL 10.9	ACTUAL 2.1
PREDIC 145.3	PREIC 11.0	PREDIC 3.0
DIFFER -1.0	DIFFER -0.1	DIFFER -0.9

TCP-A-SCI SNR	TCP-A-SCI SNR
ACTUAL 7.0	ACTUAL 3.8
PREDIC 7.8	PREDIC 4.6
DIFFER -0.7	DIFFER -0.8

1824Z-2103Z DIS DOWN AT ADS, R/T SCHED. MAINT, UNABLE TO
 ENTER CORRECT DOY ON DIS TIME NO DR
 1931Z-1956Z 360/75B DOWN, CANX R/T JOB, FORCE R-DUMP, WARM
 RESTART, DR 3015 (SYS LOCKED UP)

PASS 0252 FEB 05,1972 FEB 06,1972 DAY 036 037

 DSS 12 A.O.S. 036/2000 L.O.S. 037/0417 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

NONE

PASS 0252 FEB 06,1972 FEB 06,1972 DAY 037 037

 DSS 41 A.O.S. 037/0600 L.O.S. 037/1258 COMMANDS 11 RANGING NIL

DEVIATIONS OR ANOMALIES

0627-0635Z LOST DSN DTV FORMATS. 3100 GYST. NOT DOWN NO DR
 0815Z-0934Z LOST DTV REF DR 3018
 J917Z-0934Z 360/75 DOWN- IPL DR 3018
 0650Z-1258Z 2 WAY
 0650Z-1240Z CMD XMITTED

PASS 0253 FEB 06,1972 FEB 06,1972 DAY 037 037

 DSS 62 A.O.S. 037/1230 L.O.S. 037/2030 COMMANDS 204 RANGING NIL

DEVIATIONS OR ANOMALIES

1721Z-1729Z 360/75B DOWN, 2260'S LOCKED OUT, WARM RESTART,
 NO DR
 1900Z-2005Z DIS DISABLED FOR ODR RECALLS, NO DR, SCHEDULED
 PALLYBACK
 2002Z-2006Z 3100 DOWN, HUNG UP, RESTART REQ DR 3019
 2025Z 2029Z 3100 DOWN, HUNG UP, RESTART REQ DR 3019
 2 WAY TRACK 1255Z-2030Z
 CMDS XMTD 1310Z-2015Z

PASS 0253 FEB 06,1972 FEB 07,1972 DAY 037 038

 DSS 14 A.O.S. 037/1822 L.O.S. 038/0627 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1,2 AGC	TCP-A-ENG SNR	TCP-B-SCI SNR
ACTUAL 146.4	ACTUAL 10.7	ACTUAL 2.4
PREDIC 145.4	PREDIC 10.8	PREDIC 2.9
DIFFER -1.0	DIFFER -0.1	DIFFER -0.5
TCP-B-SCI SNR	TCP-B-SCI SNR	
ACTUAL 7.0	ACTUAL 2.8	
PREDIC 7.8	PREDIC 4.4	
DIFFER -0.8	DIFFER -1.6	
2002Z-2006Z 3100 DOWN, HUNG UP, RESTART REQ, DR 3019		
2025Z-2029Z 3100 DOWN, HUNG UP, RESTART REQ, DR 3019		
2100Z TCP-A-ENG DATA LOW SNR, RELOAD NO GOOD, SWAPPED TO		
TCP-B DR T-1820 REFERS		
0201Z-0213Z 360 DOWN IPL DR 3015		
2 WAY 0410Z-0620Z		
CMD 0415Z-0605Z		

PASS 0253 FEB 06,1972 FEB 07,1972 DAY 037 038

DSS 12 A.O.S. 037/2000 L.O.S. 038/0410 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

2002Z-2006Z 3100 DOWN, HUNG UP, RESTART REQ, DR 3019
2025Z-2029Z 3100 DOWN HUNG UP, RESTART REQ, DR 3019
0210Z-0213Z 360 DOWN, IPL DR 3015
2 WAY 2030Z-0410Z
2047Z-0405 CMD

PASS 0253 FEB 07,1972 FEB 07,1972 DAY 038 038

DSS 41 A.O.S. 038/0538 L.O.S. 038/1250 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

0545Z-0547Z HSD DOWN
0558Z RELOAD TCP-A DUE TO CMD SYS PN QUAL ERROR ALARM
0638Z SWITCH TO TCP-B
0653Z RELOAD TCP-B
1106Z-1124Z DTV DOWN 3100 PROBLEMS DR 3020
1209Z-1215Z 360/75 DOWN DR 3021

PASS 0254 FEB 07,1972 FEB 07,1972 DAY 038 038

DSS 62 A.O.S. 038/1220 L.O.S. 038/2150 COMMANDS 238 RANGING NIL

DEVIATIONS OR ANOMALIES

LOS EXTENDED DUE DSS-12 TCP-A,CMA INTERFACE PROBLEMS
2 WAY TRACK 1250Z-2150Z CMDS XMITTED 1305Z-2138Z

PASS 0254 FEB 07,1972 FEB 08,1972 DAY 038 039

DSS 14 A.O.S. 038/1820 L.O.S. 039/0626 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B DOWN SCI DATA ON TCP A ONLY
2223Z-2251Z 360/75B DOWN ERRORS ON MSD PACKS DR 5629
0003Z-0016Z,0021Z-0027Z 360/75 DOWN DR 3000
0036Z-0041Z 360/75 DOWN REF DR 3000
0044Z-0054Z 360/75 DOWN 2260'S LOCKED OUT REF DR 3000
0321Z-0330Z 360/75 DOWN 3100 HUNG UP
0435Z-0626Z 2 WAY 0435Z-0605Z CMDS XMITTED

PASS 0254 FEB 07,1972 FEB 08,1972 DAY 038 039

DSS 12 A.O.S. 038/2000 L.O.S. 039/0411 COMMANDS 10 RANGING NIL

DEVIATIONS OR ANOMALIES

2018Z-2134Z TCP-A CMA PROBLEMS
2223Z-2251Z 360 B DOWN WARM IPL WARM RESTART DR 5629
0003Z-0016Z 360 B DOWN WARM RESTART DR 3000
0021Z-0027Z 360 B DOWN WARM RESTART DR 3000
0036Z-0041Z 360 B DOWN COLD IPL DR 3000
0044Z-0059Z 360 B DOWN 2260 LOCK OUT WARM IPL COLD RT JOB STEP
DR 3000
0321Z-0330Z 3100 DOWN HUNG UP RESTART REQ NO DR
2 WAY TRACK 2150Z-0410Z CMDS XMITTED 2159Z-0403Z

PASS 0254 FEB 08,1972 FEB 08,1972 DAY 039 039

 DSS 41 A.O.S. 039/0543 L.O.S. 039/1250 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

0645Z-1250Z 2 WAY 0852Z-1235Z CMDS XMITTED
 0630Z-0659Z DSN DTV FMTS NOT UPDATING
 0650Z-0659Z 360/75 DOWN TO CORRECT DTV PROBLEM AND TLM PROCESS
 LOCK OUT DR 3018
 0706Z-0719Z,0722Z-0731Z,0749Z-0756Z 360 DOWN DR 3011
 0805Z-0816Z 360 DOWN REF DR 3011
 0829Z-0836Z 360 DOWN DR 3004
 0922Z-0934Z HSD DOWN MICROWAVE PROBLEM DR 4752
 0835Z-0845Z TCP B PROBLEM DR 1828
 0944Z-0950Z HSD DOWN BAD LINE BETWEEN JPL AND GODDARD DR 4753
 1057Z-1241Z 360/75 DOWN DR 3032
 1234Z-1241Z 360/75 DOWN CANNOT DELETE DSS 41 PROCESS DR 3033

PASS 0254 FEB 08,1972 FEB 08,1972 DAY 039 039

 DSS 42 A.O.S. 039/0609 L.O.S. 039/0652 COMMANDS N/R RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0255 FEB 08,1972 FEB 08,1972 DAY 039 039

 DSS 51 A.O.S. 039/1200 L.O.S. 039/1600 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1234Z-1241Z 360/75B DOWN CANNOT DELETE DSS 41 DR 3033
 1314Z-1326Z 3100 DOWN REF DR 3020
 3 WAY TRACKS NO CMDS

PASS 0255 FEB 08,1972 FEB 08,1972 DAY 039 039

 DSS 62 A.O.S. 039/1220 L.O.S. 039/2030 COMMANDS 201 RANGING NIL

DEVIATIONS OR ANOMALIES

1234Z-1241Z 360/75B CANNOT DSS 41 PROCESS DR 3033
 1314Z-1326Z 3100 DOWN REF DR 3020
 2 WAY TRACK 1250Z-2030Z CMDS XMITTED 1305Z-2015Z

PASS 0255 FEB 08,1972 FEB 09,1972 DAY 039 040

 DSS 14 A.O.S. 039/1818 L.O.S. 040/0625 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1,2AGC	TCP-B-ENG SNR	TCP-A-SCI SNR
ACTUAL 146.4	ACTUAL 10.0	ACTUAL 3.2
PREDIC 145.5	PREDIC 10.6	PREDIC 4.9
DIFFER -0.9	DIFFER -0.6	DIFFER -0.7
TCP-A-SCI SNR	TCP-A-SCI SNR	
ACTUAL 2.6	ACTUAL 1.9	
PREDIC 3.9	PREDIC 2.7	
DIFFER -1.3	DIFFER -0.8	
1948Z-TCP-B LOST ODR TAPE WRITE CAP BILITY, ENG DATA TAKEN		
OFF LINE, HI RATE DATA ONLY ON LINE TCP-A		

2045Z-2046Z DIS HUNG UP RELOAD REQ NO DR
 2059Z-2103Z DIS HUNG UP RELOAD REQ NO DR
 2103Z-2117Z 360/75B DOWN, 2260'S LOCKED, CANX R/T JOB, WARM
 RESTART, FAILED, FORCE R-DUMP, WARM IPL/RESTART DR 3036
 2129Z-2143Z 360/75B DOWN, CMD RECALL PROB'S CANCELLED R/T
 JOB, FAILED, WARM IPL/RESTART DR 3036
 2 WAY 0405Z-0620
 CMD 0410Z-0600Z

PASS 0255 FEB 08,1972 FEB 09,1972 DAY 039 040

DSS 12 A.O.S. 039/2000 L.O.S. 040/0406 COMMANDS 9 RANGING NIL

DEVIATIONS OR ANOMALIES

2030Z-2032Z DIS HUNG UP
 2103Z-2117Z 360/75B DOWN 2260'S LOCKED OUT DR 3036
 2129Z-2143Z 360/75B DOWN CMD RECALL PROBLEM DR 3036
 2 WAY 2030Z-0405Z
 CMDS XMITTED 2040Z-0400Z

PASS 0255 FEB 09,1972 FEB 09,1972 DAY 040 040

DSS 42 A.O.S. 040/0545 L.O.S. 040/1140 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0256 FEB 09,1972 FEB 09,1972 DAY 040 040

DSS 62 A.O.S. 040/1030 L.O.S. 040/2030 COMMANDS 174 RANGING NIL

DEVIATIONS OR ANOMALIES

1331Z-1338Z 360/75 LOCKED OUT OF SYSTEM DR 3042
 1623Z-1634Z 360/75 DOWN, DTV SYS PROBS, COLD IPL/RESTART
 DR 3044
 1925Z-1937Z DIS TAKEN DOWN FOR ODR RECALLS, TCP-B TAKEN DOWN
 ALSO
 2 WAY TRACK 1140Z-2030Z CMDS XMTD 1148Z-2018Z

PASS 0256 FEB 09,1972 FEB 10,1972 DAY 040 041

DSS 14 A.O.S. 040/1815 L.O.S. 041/0625 COMMANDS 2 RANGING MU

DEVIATIONS OR ANOMALIES

RX1,2 AGC	TCPA-ENGSR	TCPB-SCISNR
ACTUAL-147.4DBM	ACTUAL 6.1	ACTUAL 3.6
PREDIC-146.5DBM	PREDIC 7.9	PREDIC 4.4
DIFFER- -0.9DB	DIFFER -1.8	DIFFER -0.8
TCPB-SCI SNR	TCPB-SCISNR	
PREDIC 7.7	PREDIC 3.2	
DIFFER -0.9	DIFFER -1.6	

PASS 0256 FEB 09,1972 FEB 10,1972 DAY 040 041

 DSS 12 A.O.S. 040/2000 L.O.S. 041/0420 COMMANDS 7 RANGING NIL

DEVIATIONS OR ANOMALIES

2105Z-2118Z 360/75B-DOWN, CMD PROBS, WARM IPL/RESTART DR 3048
 0032Z-0043Z 360/75B-DOWN DUE CORE FRAG., WARM IPL/WARM RE-
 START DR 3051
 0123Z-0148Z 360/75B DOWN DUE CORE FRAG., COLD RESTART ON
 R/T JOB DR 3051
 2 WAY TRACK 2055Z-0420Z
 CMDS XMTD 1148Z-2018Z

PASS 0256 FEB 10,1972 FEB 10,1972 DAY 041 041

 DSS 41 A.O.S. 041/0538 L.O.S. 041/1200 COMMANDS 8 RANGING NIL

DEVIATIONS OR ANOMALIES

06 5Z-0809Z; 1000Z-1200Z 2 WAY TRACK
 0712Z-0752Z; 1000Z-1145Z CMD XMITD

PASS 0257 FEB 10,1972 FEB 10,1972 DAY 041 041

 DSS 62 A.O.S. 041/1130 L.O.S. 041/2030 COMMANDS 603 RANGING NIL

DEVIATIONS OR ANOMALIES

1754Z-1808Z 360 DOWN DR 3061

PASS 0257 FEB 10,1972 FEB 11,1972 DAY 041 042

 DSS 14 A.O.S. 041/1814 L.O.S. 042/0623 COMMANDS 1 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1,2 AGC	TCP-A-ENG SNR	TCP-B-SCI SNR
ACTUAL 147.4	ACTUAL 6.0	ACTUAL 3.6
PREDIC 146.6	PREDIC 6.1	PREDIC 4.3
DIFFER -0.8	DIFFER -0.1	DIFFER -0.7

TCP-B-SCI SNR	TCP-B-SCI SNR
PREDIC 7.6	PREDIC 2.5
DIFFER -0.8	DIFFER -0.8

1723Z-1733Z, 1108 DOWN NO DR
 1754Z-1808Z 360/75 DOWN DR 3061
 2017Z-2028Z 360/75 DOWN SCHED.
 2055Z-2113Z 360/75 DOWN DR 3064
 2143Z-2153Z 360/75 DOWN
 2231Z-2239Z 360/75 DOWN
 2 WAY TRACK 0435Z-0623Z
 CMDS XMTD 0555Z-0620Z

PASS 0257 FEB 10,1972 FEB 11,1972 DAY 041 042

 DSS 12 A.O.S. 041/2000 L.O.S. 042/0410 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

2017-2028 360/75 DOWN (SKED)
 2055-2114Z 360/75 DOWN DR 3064
 2143Z-2153Z 360/75 DOWN

2231Z-2239Z 360/75 DOWN
2-WAY TRACK 2055Z-0410Z
CMDS XMTD 721 5Z-0336Z

PASS 0257 FEB 11,1972 FEB 11,1972 DAY 042 042

DSS 41 A.O.S. 042/0539 L.O.S. 042/1240 COMMANDS 17 RANGING NIL

DEVIATIONS OR ANOMALIES

ADS 0539-0612Z DIS DOWN DUE TO TIME PROBLEM NO DR
1216Z-1222Z 360/75 DOWN FOR SCHEDULE SWAP TO "A" STRING
0645Z-1240Z 2 WAY
0646Z-1225Z CMDS XMITTED

PASS 0258 FEB 11,1972 FEB 11,1972 DAY 042 042

DSS 62 A.O.S. 042/1210 L.O.S. 042/2035 COMMANDS 245 RANGING NIL

DEVIATIONS OR ANOMALIES

1306Z-2035Z 2 WAY 1241:51Z-2020Z 245 CMDS
1216Z-1222Z 360/75 DOWN FOR SCHED STRING SWAP
1831Z-1837Z 360/75 DOWN FOR VERSION CHANGE
1256Z-1312Z 360/75 DOWN, CAUSE UNKNOWN DR 3074
2027Z-2034Z 360/75 DOWN, DSS 51 PNF SIM DATA PROBABLE CAUSE.
DTV FORMAT 02 UNAVAILABLE TO RECORD DIS/TCP LGWR AND LGER
DR 3078

PASS 0258 FEB 11,1972 FEB 12,1972 DAY 042 043

DSS 14 A.O.S. 042/1811 L.O.S. 043/0621 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP/DIS ENABLED 1810Z
1831Z-1837Z 360/75 DOWN FOR VERSION CHANGE
2029Z-2034Z 360/75 DOWN DSS 51 DATA PROBLEMS DR 3078
2207Z-2250Z 360/75 TAPE ALLOCATION PROBLEM STRING SWAP TO A
DR 3080-DR 3082
2341Z-2350Z 360/75 DOWN 2260 LOCKED OUT DR 3084
0409Z-0432Z 360/75 DOWN DR 3089
DR N-0075 D/L -2.1DB BELOW PREDIX
2 WAY 0400Z-0621Z CMDS XMITTED 0538Z

PASS 0258 FEB 11,1972 FEB 12,1972 DAY 042 043

DSS 12 A.O.S. 042/2000 L.O.S. 043/0400 COMMANDS 17 RANGING NIL

DEVIATIONS OR ANOMALIES

2027Z-2034Z 360/75 DOWN, DSS51(PN-F SIM) DATA PROBABLE CAUSE
DR 3078
2207Z-2250Z 360/75 DOWN, TAPE ALLOCATION PROBLEM (2227Z
PRINTER NEEDED TO IPL DOWN 2232Z RE IPL TO GET PRINTER UP)
UNABLE TO GET "A" SYSTEM UP-STRING SWAP TO "B" 2238Z
REF DR 3082 AND 5081
2341Z-2350Z 360/75 DOWN, 2260'S LOCKED OUT 3084
2 WAY TRACK 2101Z-0400Z
CMDS XMTD 2019Z-0334Z

PASS 0258 FEB 12,1972 FEB 12,1972 DAY 043 043

DSS 41 A.O.S. 043/0539 L.O.S. 043/1240 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

0557Z TCP-A RELOADED DUE TO CMD CHECKOUT ERRORS NO DR
2 WAY TRACK 0945Z-1240Z CMDS XMITTED 0957Z-1225Z

PASS 0259 FEB 12,1972 FEB 12,1972 DAY 043 043

DSS 62 A.O.S. 043/1210 L.O.S. 043/2030 COMMANDS 280 RANGING NIL

DEVIATIONS OR ANOMALIES

1651Z-1656Z RELOAD DIS
1823Z-1833Z 360 DOWN DR 3093

PASS 0259 FEB 12,1972 FEB 13,1972 DAY 043 044

DSS 14 A.O.S. 043/1809 L.O.S. 044/0623 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1823Z-1833Z 360/75 DOWN DR 3093
2018Z-2042Z NO ENG DATA DUE TO EXPERIMENT
1954Z-2022Z SDA NO 4 CAUSING SNR FLUCTUATIONS DR T-1834

PASS 0259 FEB 12,1972 FEB 13,1972 DAY 043 044

DSS 12 A.O.S. 043/2125 L.O.S. 044/0025 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0259 FEB 13,1972 FEB 13,1972 DAY 044 044

DSS 41 A.O.S. 044/0535 L.O.S. 044/1225 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

0738Z-0758Z 360/75B DOWN FOR STRING SWAP NO DR
2 WAY TRACK 0550Z-1220Z CMDS XMITTED 0605Z-1211Z

PASS 0260 FEB 13,1972 FEB 13,1972 DAY 044 044

DSS 62 A.O.S. 044/1210 L.O.S. 044/2032 COMMANDS 226 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY 1246Z-2032Z
CMDS XMITTED 1223Z-2015Z

PASS 0260 FEB 13,1972 FEB 14,1972 DAY 044 045

DSS 14 A.O.S. 044/1807 L.O.S. 045/0622 COMMANDS 1 RANGING NIL
DEVIATIONS OR ANOMALIES

1852Z-1854Z ROL/RIL EMERGENCY STOP SWITCH FAILED DR T-1835
2130Z-2133Z TCP-A HUNG-UP DR T-1836
0407Z-0413Z 360/75 DOWN DR 3095
DR N-0076 T-64 ON 50 BPS SNR -2.0DB
DR T-1837 BDA OUT OF LOCK NO RE
2 WAY TRACK 0426Z-0615Z CMDS XMITTED 0324Z-0334Z

PASS 0260 FEB 13,1972 FEB 14,1972 DAY 044 045

DSS 12 A.O.S. 044/2116 L.O.S. 045/0024 COMMANDS 15 RANGING NIL
DEVIATIONS OR ANOMALIES

SKED ADS AND ACTUAL TIME OFF DUE TO SKED ERROR
2135Z-2140Z TCP-B RELOAD NO DR
2 WAY 2155Z-0024Z CMDS XMITTED 2211Z-0001Z

PASS 0260 FEB 14,1972 FEB 14,1972 DAY 045 045

DSS 42 A.O.S. 045/0156 L.O.S. 045/1104 COMMANDS 7 RANGING NIL
DEVIATIONS OR ANOMALIES

RELEASED AFTER 2-WAY TRANSFER
0418Z UNABLE TO LOCK SSA TO SDA 2 DR T-1838
0610Z LOW SCI SNR DUE TO BAD ISO AMP DR T-1839
LOST TCP-A I/O ACCESS DR T-1841
2 WAY TRACK 0205Z-1045Z
CMDS XMITTED 0220Z-1041Z

PASS 0261 FEB 14,1972 FEB 14,1972 DAY 045 045

DSS 62 A.O.S. 045/1011 L.O.S. 045/1851 COMMANDS 275 RANGING NIL
DEVIATIONS OR ANOMALIES

1045Z-1851Z 2 WAY CMDS XMITTED 1048Z-1840Z
1851Z DSS 62 LOS EARLY NAA NOT NOTIFIED OF CHANGE

PASS 0261 FEB 14,1972 FEB 15,1972 DAY 045 046

DSS 12 A.O.S. 045/2105 L.O.S. 046/0023 COMMANDS 17 RANGING NIL
DEVIATIONS OR ANOMALIES

2147Z-0023Z 2 WAY 2131Z-0016Z 17 CMDS

PASS 0262 FEB 15,1972 FEB 16,1972 DAY 046 047

DSS 14 A.O.S. 046/1802 L.O.S. 047/0620 COMMANDS RANGING NIL
DEVIATIONS OR ANOMALIES

DIS LGWR AND LGER HANG UP AT ADS
2110Z-2115Z 360/75 DOWN DR 3108

0051Z-0015Z 360/75 DOWN BAD DISC MODULE DR 3110
0348Z-0405Z 360/75 DOWN DR 3112
0600Z-0607Z 360/75 DOWN DR 3113
DR T-1848 UNABLE TO ACCESS TCP-B
1 AND 3 WAY TRACK NO CMDS

PASS 0262 FEB 15,1972 FEB 16,1972 DAY 046 047

DSS 12 A.O.S. 046/2120 L.O.S. 047/0026 COMMANDS 18 RANGING NIL

DEVIATIONS OR ANOMALIES

2209Z-0019Z CMDS XMTD
2207Z-0026Z 2 WAY TRACK

PASS 0262 FEB 16,1972 FEB 16,1972 DAY 047 047

DSS 41 A.O.S. 047/0156 L.O.S. 047/1216 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

0348Z-0405Z 360/75B DOWN WARM IPL/COLD RT JCB STEP DR 3112
0600Z-0607Z 360/75B DOWN WARM RESTART ON RT JOB STEP DR 3113
0649Z-0656Z 360/75B DOWN WARM RESTART ON RT JOB STEP DR 3114
0819Z-0836Z 360/75B DOWN LOCKED OUT R DUMP WARM IPL DR 3115
1212Z-1221Z 3100 DOWN HUNG UP RELOAD REQ DR 3119
NET CONTROL LOGS R/O ALARMS RCVD WHEN DDA A SWITCHED OFF
DR T-1849
2 WAY TRACK 0814Z-1216Z
CMDS XMITTED 0936Z-1201Z

PASS 0263 FEB 16,1972 FEB 16,1972 DAY 047 047

DSS 62 A.O.S. 047/1145 L.O.S. 047/1917 COMMANDS 235 RANGING NIL

DEVIATIONS OR ANOMALIES

1236Z-1256Z 360/75B DOWN, NATTEL SCR TAPE WRITE PROBS,
WARM RESTART REQUIRED REF DR 3106
1242Z-1917Z 2 WAY
1231Z-1845Z 235 CMDS

PASS 0263 FEB 16,1972 FEB 17,1972 DAY 047 048

DSS 14 A.O.S. 047/1801 L.O.S. 048/0619 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B-SCI SNR
ACTUAL 3.1
PREDIC 3.8
DIFFER -0.7
1800Z-1811Z 360/75B DOWN, 2260'S LOCKED OUT WARM RESTART
REQ DR 3106
2204Z-2216Z 360/75B DOWN, 2260'S LOCKED OUT, WARM RESTART
REQ DR 3123
0008Z-0017Z 360/75B DOWN-LOCK OUT OF DTV DR 3126
0233Z-0243Z 360/75B DOWN-LOCK OUT OF DTV DR 3128
1740Z CONTINUOUS CONFIGURATION WORD CHECK FAILURE ON TCP-A,
SYSTEM RED, DR 0088

PASS	0263	FEB 16,1972	FEB 17,1972	DAY 047	048
DSS 12	A.O.S. 047/2123	L.O.S. 048/0019	COMMANDS 15	RANGING NIL	
DEVIATIONS OR ANOMALIES					
2204Z-2216Z 360 DOWN DR 3123					
0008Z-0017Z 360 DOWN-LOCKOUT OF DTV DR 3126					
2200Z-0019Z 2 WAY TRACK					
2200Z-0008Z CMD XMITTED					

PASS	0263	FEB 17,1972	FEB 17,1972	DAY 048	048
DSS 41	A.O.S. 048/0155	L.O.S. 048/1015	CCMMANDS 3	RANGING NIL	
DEVIATIONS OR ANOMALIES					

PASS	0264	FEB 17,1972	FEB 17,1972	DAY 048	048
DSS 62	A.O.S. 048/1005	L.O.S. 048/1857	COMMANDS 252	RANGING NIL	
DEVIATIONS OR ANOMALIES					
1030Z-1036Z 360B DOWN TLM PROC HUNG UP CANCEL RT JOB STEP-					
WARM RESTART DR 3133					
1711Z-1717Z 360 DOWN WARM RESTART					

PASS	0264	FEB 17,1972	FEB 18,1972	DAY 048	049
DSS 12	A.O.S. 048/2120	L.O.S. 049/0019	COMMANDS 16	RANGING NIL	
DEVIATIONS OR ANOMALIES					
TCP "B" AND LGWR AND LGER HUNG UP. STATION WILL NOT RELOAD					
TO CORRECT PROBLEM AT THIS TIME DR T 1852					

PASS	0264	FEB 18,1972	FEB 18,1972	DAY 049	049
DSS 41	A.O.S. 049/0154	L.O.S. 049/1015	COMMANDS 2	RANGING NIL	
DEVIATIONS OR ANOMALIES					
STATION RELEASED AFTER TWO WAY TRANSFER					
2 WAY TRACK 0159Z-1015Z CMDS XMITTED 0214Z-1000Z					

PASS	0265	FEB 18,1972	FEB 18,1972	DAY 049	049
DSS 62	A.O.S. 049/1002	L.O.S. 049/1836	COMMANDS 284	RANGING NIL	
DEVIATIONS OR ANOMALIES					
1515Z-1529Z 360/75B DOWN, TLM PROC HALTED, WARM IPL/RESTART					
DR 3146					
1832Z LOS, 360/75B DOWN, RESTART REQ DR 3123					
2 WAY TRACK 1042Z-1836Z					
CMDS XMTD 1510Z-1733Z					

PASS 0265 FEB 18,1972 FEB 19,1972 DAY 049 050

DSS 14 A.O.S. 049/1756 L.O.S. 050/0618 COMMANDS 1 RANGING MU

DEVIATIONS OR ANOMALIES

TCP B-SCI SNR
ACTUAL 2.4
PREDIC 3.2
DIFFER -0.8
1832Z-1837Z 360/75B DOWN RESTART REQ DR 3123
2244Z-2251Z 360/75B DOWN RESTART REQ DR 3153
0014Z-0022Z 360/75B DOWN DR 3155
0538Z-0609Z 360/75B DOWN, POWER FAILURE ON DISK PACKS,
COLD/WARM RESTART DR 3158
0520Z-0618Z 2 WAY
0520Z-0555Z CMD XMITTED

PASS 0265 FEB 18,1972 FEB 19,1972 DAY 049 050

DSS 12 A.O.S. 049/2123 L.O.S. 050/0009 COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

2244Z-2251Z 360/75B DOWN, RESTART REQ DR 3153
2159Z-0009Z 2 WAY TRACK
2159Z-0002Z CMDS XMITTED

PASS 0265 FEB 19,1972 FEB 19,1972 DAY 050 050

DSS 41 A.O.S. 050/0153 L.O.S. 050/1010 COMMANDS 5 RANGING NIL

DEVIATIONS OR ANOMALIES

DOP NOISE N/A DUE TO VCO TEST
2 WAY 0243Z-0455Z,0955Z-1010Z
0221Z-0440Z,0940Z-0955Z 5 CMDS
0538Z-0609Z 360/75 DOWN, COLD IPL AND WARM RESTART REQUIRED
DR 3158

PASS 0266 FEB 19,1972 FEB 19,1972 DAY 050 050

DSS 62 A.O.S. 050/1003 L.O.S. 050/1854 CCMANDS 305 RANGING NIL

DEVIATIONS OR ANOMALIES

1049Z-1147Z 360/75 DOWN, DTV'S HALTED, 2260'S LOCKED OUT.
WARM IPL AND WARM RESTART REQUIRED DR 3859 HAD TO SWAP TO
360/75A SYSTEM
2 WAY TRACK 1037Z-1854Z
CMDS XMITTED 1039Z-1727Z

PASS 0266 FEB 19,1972 FEB 20,1972 DAY 050 051

DSS 12 A.O.S. 050/2123 L.O.S. 051/0028 COMMANDS 16 RANGING NIL

DEVIATIONS OR ANOMALIES

AOS 2157Z NO TCP/DIS INTERFACE
2143Z-2147Z DIS RELOAD IN ATTEMPT TO GET TCP/DIS INTERFACE UP

PASS 0266	FEB 20,1972	FEB 20,1972	DAY 051	051
DSS 41	A.O.S. 051/0153	L.O.S. 051/1010	COMMANDS 8	RANGING NIL
DEVIATIONS OR ANOMALIES				

0525Z-0533Z 360/75 DOWN-SCHEDULE STRING SWAP. UP ON "B" STRING
 0723Z-TCP REINILIZED AND SWITCHED TO TCP "B" DRT 1854 DR N0096
 2305Z-1010Z 2 WAY TRACK
 2305Z-0955Z CMDS XMITTED

PASS 0266	FEB 20,1972	FEB 21,1972	DAY 051	052
DSS 14	A.O.S. 051/1755	L.O.S. 052/0618	COMMANDS 0	RANGING NIL
DEVIATIONS OR ANOMALIES				

TCP-A RELOAD DUE LGWR/LGER PROBLEMS FROM AOS 1904Z
 0525Z-0533Z 360/75 DOWN-SCHEDULE STRING SWAP UPON "B" STRING

PASS 0267	FEB 20,1972	FEB 20,1972	DAY 051	051
DSS 62	A.O.S. 051/0958	L.O.S. 051/1914	COMMANDS 292	RANGING NIL
DEVIATIONS OR ANOMALIES				

2 WAY TRACK 1037Z-1914Z
 CMDS XMTD 1045Z-1747Z

PASS 0267	FEB 20,1972	FEB 21,1972	DAY 051	052
DSS 14	A.O.S. 051/1753	L.O.S. 052/0617	COMMANDS 0	RANGING NIL
DEVIATIONS OR ANOMALIES				

2001Z-2040Z 3100 SYSTEM DOWN DR 3167
 2147Z-2202Z 360/75B DOWN, REQUIRE RESTART ON RT JOB, DUE TO PTR QUE PROBLEMS. RESTART DID NOT TAKE GOING WARM/WARM.
 DR 3169
 0348Z-0403Z 360/75 DOWN-SCHEDULE STRING SWAP TO "A" STRING

PASS 0267	FEB 20,1972	FEB 21,1972	DAY 051	052
DSS 12	A.O.S. 051/2102	L.O.S. 052/0026	COMMANDS 15	RANGING NIL
DEVIATIONS OR ANOMALIES				

2001Z-2040Z 3100 SYSTEM DOWN DR 3167
 2147Z-2202Z 360/75B DOWN, REQUIRED RESTART ON RT JOB, DUE TO PTR QUE PROBLEMS. RESTART DID NOT TAKE GOING WARM/WARM
 DR 3169
 2154Z-0026Z 2 WAY TRACK
 2154Z-0008Z CMDS XMITTED

PASS 0267 FEB 21,1972 FEB 21,1972 DAY 052 052

DSS 41 A.O.S. 052/0155 L.O.S. 052/1005 COMMANDS 5 RANGING NIL
DEVIATIONS OR ANOMALIES

0234Z-1005Z 2 WAY
0212Z-0950Z 5 CMDS
0155Z-0222Z DIS PROBLEM-MONITOR DATA VALIDATED AT 0222Z
NO DR
0348Z-0403Z 360/75 DOWN FOR SCHED. STRING SWAP FROM "B"
TO "A"

PASS 0268 FEB 21,1972 FEB 21,1972 DAY 052 052

DSS 62 A.O.S. 052/0956 L.O.S. 052/1847 COMMANDS 258 RANGING NIL
DEVIATIONS OR ANOMALIES

1654Z-1700Z 360/75A DOWN, RESTART REQ
2 WAY TRACK 1032Z-1847Z
CMDS XMTD 1055Z-1801Z

PASS 0268 FEB 21,1972 FEB 22,1972 DAY 052 053

DSS 14 A.O.S. 052/1751 L.O.S. 053/0616 COMMANDS 5 RANGING NIL
DEVIATIONS OR ANOMALIES

2231Z-2323Z 2-WAY
2309Z 360/75 RELEASE FROM SUPPORT.

PASS 0268 FEB 22,1972 FEB 22,1972 DAY 053 053

DSS 42 A.O.S. 053/0202 L.O.S. 053/1034 COMMANDS RANGING NIL
DEVIATIONS OR ANOMALIES

DR T-73 D/L EXCEEDED LIMIT OF 1.5 DB
0248Z-0316Z MECHANICAL FAILURE TCP-A DR T-1858
0248Z-0316Z LOSS OF CMD MOD DR 1860
1026Z-1028Z LOSS OF UPLINK SIGNAL DR T-1862
0258Z-1005Z 2 WAY 0238Z-0905Z CMDS XMITTED

PASS 0269 FEB 22,1972 FEB 22,1972 DAY 053 053

DSS 62 A.O.S. 053/0954 L.O.S. 053/1859 COMMANDS 289 RANGING NIL
DEVIATIONS OR ANOMALIES

3 CMDS MANUALLY DUE TO 360/75 DOWN DR 3174
1641Z-1650Z 3100 DOWN
1703Z-1718Z 360/75A DOWN DR 3174
2 WAY 1155Z-1859Z CMDS XMITTED 0940Z-1808Z

PASS 0269 FEB 22,1972 FEB 23,1972 DAY 053 054

DSS 14 A.O.S. 053/1749 L.O.S. 054/0615 COMMANDS 0 RANGING NIL
DEVIATIONS OR ANOMALIES

PASS 0269 FEB 22,1972 FEB 23,1972 DAY 053 054

DSS 12 A.O.S. 053/2120 L.O.S. 054/0029 COMMANDS 7 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY 2101Z-0029Z CMDS XMITTED 2101Z-0005Z

PASS 0269 FEB 23,1972 FEB 23,1972 DAY 054 054

DSS 41 A.O.S. 054/0151 L.O.S. 054/1215 COMMANDS 17 RANGING NIL

DEVIATIONS OR ANOMALIES

1202Z-1211Z 360175A DOWN DUE TO HEAVY BACKLOG UNABLE TO WRITE
TLM SDR TAPE. SUSPECT PROBLEM DUE TO NAT TRK PROX GENERATION
DR 3177

PASS 0270 FEB 23,1972 FEB 23,1972 DAY 054 054

DSS 62 A.O.S. 054/1100 L.O.S. 054/1855 COMMANDS 292 RANGING NIL

DEVIATIONS OR ANOMALIES

1203Z-1211Z 360/75A DOWN FOR WARM RESTART. HEAVY BACKLOG
UNABLE TO WRITE TLM SDR TAPE. SUSPECT PROBLEM DUE TO PROX
GENERATION DR 3177
1305Z-1330Z 360/75A TAKEN DOWN TO SPLIT SUPPORT OF PN AND
MM9-WILL COME UP COLD IPL AND WARM RESTART
1826Z-1838Z 360/75A DOWN REF DR 3178

PASS 0270 FEB 23,1972 FEB 24,1972 DAY 054 055

DSS 14 A.O.S. 054/1746 L.O.S. 055/0615 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1826Z-1838Z 360 "A" DOWN RE: DR 3178
1855Z-1858Z 3100 DOWN-DTV'S STOPPED RESTART REQ
2207Z-2213Z 3100 DOWN SCHEDULED
2348Z-2356Z 360 "A" DOWN RESTART REQUIRED
0033Z-0036Z 360 "A" DOWN FOR PRINTER INSTALLATION-SCHEDULED
0036Z-0132Z DTV FMTS CONTAINING MONITOR DATA NOT DISPLAYING
NUMBERS
0119Z-0132Z 360/75 "A" DOWN TO RECOVER DTV SYSTEM DR 3181

PASS 0270 FEB 23,1972 FEB 24,1972 DAY 054 055

DSS 12 A.O.S. 054/2120 L.O.S. 055/0000 COMMANDS 13 RANGING NIL

DEVIATIONS OR ANOMALIES

2209Z-2213Z 3100 DOWN, SCHEDULED
2348Z-2356Z 360 A DOWN, RESTART DR 3180

PASS 0270 FEB 24,1972 FEB 24,1972 DAY 055 055

DSS 41 A.O.S. 055/0148 L.O.S. 055/1100 COMMANDS 2 RANGING NIL

DEVIATIONS OR ANOMALIES

0233Z-1000Z 2 WAY
0210Z-0945Z 2 CMDS

PASS 0271 FEB 24,1972 FEB 24,1972 DAY 055 055

DSS 62 A.O.S. 055/0949 L.O.S. 055/1855 COMMANDS 348 RANGING NIL

DEVIATIONS OR ANOMALIES

1520Z-1538Z 360/75A TAKEN DOWN FOR RESTART DUE TO UNABLE
TO TRANSMIT SOE'S AND DOA'S DR 3184
1805Z-1814Z 360/75A DOWN, HSP FMT OUTPUT PROBS, WARM RE-
START DR 3186
2 WAY TRACK 1000Z-1855Z
CMDS XMTD 1001Z-1845Z

PASS 0271 FEB 24,1972 FEB 25,1972 DAY 055 056

DSS 14 A.O.S. 055/1745 L.O.S. 056/0612 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

1745Z-1821Z, DIS DOWN, LOST TAPE WRITE CAPB, RELOAD REQ
DR N-0107
1805Z-1814Z, 360/75A DOWN, HSP FMT OUTPUT PROBS, WARM RESTART
DR 3186
2330Z-2338Z, 360/75A DOWN, CPU CABLES SWAPPED, NO DR
1745Z-1821Z, NO DIS LOG WRITE-RELOAD REQ DR N-0107

PASS 0271 FEB 24,1972 FEB 25,1972 DAY 055 056

DSS 12 A.O.S. 055/2120 L.O.S. 056/0027 COMMANDS 13 RANGING NIL

DEVIATIONS OR ANOMALIES

2330Z-2338Z 360/75A DOWN, CPU CABLES SWAPPED, WARM RESTART
NO DR
2 WAY 2134Z-0027Z
CMD 2140Z-0020Z

PASS 0271 FEB 25,1972 FEB 25,1972 DAY 056 056

DSS 41 A.O.S. 056/0147 L.O.S. 056/1210 CCMMANDS 19 RANGING NIL

DEVIATIONS OR ANOMALIES

DR T74 WRITTEN ON EXCESSIVE RESID FOR D/L SS- TOL. PLUS OR
MINUS 1.50B
0232Z-1210Z 2 WAY
0209Z-1155Z 19 CMDS
TFR 41/DIS/801147 EXCESSIVE WRITE ERRORS ON DIS MAG TAPE
ALPHA

PASS 0272 FEB 25,1972 FEB 25,1972 DAY 056 056

 DSS 62 A.O.S. 056/1100 L.O.S. 056/1859 COMMANDS 256 RANGING NIL
 DEVIATIONS OR ANOMALIES

1630Z-1640Z 360/75A DOWN-WARM IPL/WARM START DR 3187
 1840Z-1845Z 360/75A DOWN-STRING SWAP-UPON "B" STRING
 1238Z-1859Z 2 WAY
 1238Z-1845Z CMD XMITTED

PASS 0272 FEB 25,1972 FEB 26,1972 DAY 056 057

 DSS 14 A.O.S. 056/1743 L.O.S. 057/0613 COMMANDS 1 RANGING MU
 DEVIATIONS OR ANOMALIES

TCP-B-SCI SNR
 ACTUAL 2.3
 PREDIC 4.3
 DIFFER -2.0
 1840Z-1845Z 360 DOWN STRING SWAP UP ON "B"
 1905Z-1906Z 360 DOWN STRING SWAP UP ON "A"
 1931Z-1938Z 360 DOWN DR 3189
 2229Z-2234Z 3100 DOWN DR 3021
 2331Z-2338Z 3100 DOWN DR 3021
 0029Z-0047Z 360 DOWN FOR RESTART, COLD IPL DR 3190
 0130Z-0138Z 3100 DOWN DR 3021
 2 WAY TRACK 0515Z-0605Z
 CMD 0448Z-0545Z

PASS 0272 FEB 25,1972 FEB 26,1972 DAY 056 057

 DSS 12 A.O.S. 056/2115 L.O.S. 057/0020 COMMANDS 10 RANGING NIL
 DEVIATIONS OR ANOMALIES

2229Z-2234Z 3100 DOWN RE: DR 3021
 2331Z-2338Z 3100 DOWN RE: DR 3021

PASS 0272 FEB 26,1972 FEB 26,1972 DAY 057 057

 DSS 41 A.O.S. 057/0148 L.O.S. 057/1145 COMMANDS 10 RANGING NIL
 DEVIATIONS OR ANOMALIES

DO BIAS +35.104 1 WAY CHAR. NOISE .002 2 WAY
 0150Z-0200Z TCP-B RELOAD
 0205Z-0209Z TCP-B RELOAD
 0646Z-0700Z 360/75 DOWN; DUE TO PTR HANG-UP, CANCELLED
 RT JOB AND RESTART DR 3192
 0737Z-0748Z 360/75 DOWN, SKED STRING SWAP FROM "A" TO "B"
 MISSED ACQ 0955Z DR 1869
 2 WAY TRACK 0234Z-1145Z
 CMDS XMTD 0417Z-1123Z

PASS 0273 FEB 26,1972 FEB 26,1972 DAY 057 057

 DSS 62 A.O.S. 057/1115 L.O.S. 057/1909 COMMANDS 220 RANGING NIL
 DEVIATIONS OR ANOMALIES

NOTE: DR T-1870 REF 62B TCP RELOAD

PASS 0273 FEB 26,1972 FEB 27,1972 DAY 057 058

DSS 14 A.O.S. 057/1740 L.O.S. 058/0613 COMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B-SCI SNR
ACTUAL 4.0
PREDIC 4.6
DIFFER -0.6

PASS 0273 FEB 26,1972 FEB 27,1972 DAY 057 058

DSS 12 A.O.S. 057/2120 L.O.S. 058/0020 COMMANDS 13 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 2207Z-0020Z
CMD 2146Z-0005Z

PASS 0273 FEB 27,1972 FEB 27,1972 DAY 058 058

DSS 41 A.O.S. 058/0145 L.O.S. 058/1020 COMMANDS 3 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-B RELOADS, 5 RELOADS FROM 0153Z-0627Z REF DR T-1871
2 WAY TRACK 0228Z-0955Z
CMDS XMTD 0437Z-0810Z

PASS 0274 FEB 27,1972 FEB 27,1972 DAY 058 058

DSS 62 A.O.S. 058/0945 L.O.S. 058/1910 COMMANDS 222 RANGING NIL

DEVIATIONS OR ANOMALIES

1523Z-1544Z 360/75B DOWN DUE TO HARDWARE PROBLEM, A SYSTEM
SWAP TO "A" MADE DR 3201
1555Z-1606Z 226J-043 LOCKED OF 360/75 DR 3202
1023Z-1910Z 2 WAY
1023Z-1850Z CMDS XMITTED

PASS 0274 FEB 27,1972 FEB 28,1972 DAY 058 059

DSS 14 A.O.S. 058/1759 L.O.S. 059/0612 CGMMANDS 0 RANGING NIL

DEVIATIONS OR ANOMALIES

3 MIN. LATE ACK DUE TO ELECTRICAL PROBLEM PAD 2 HYDROSTATIC
EARING TFR 804365 DR T1872
331Z-2348Z 360"A" DOWN-SCHEDULED COLD IPL
153Z-0159Z 360 DOWN SCHEDULED STRING SWAP-UP ON "B"

CB-B-SCI
ACTUAL 3.5
PREDIC 3.1
DIFFER +0.4

PASS 0274	FEB 27,1972	FEB 28,1972	DAY 058 059
DSS 12	A.O.S. 058/2120	L.O.S. 059/0012	COMMANDS 16 RANGING NIL
DEVIATIONS OR ANOMALIES			

PASS 0274	FEB 28,1972	FEB 28,1972	DAY 059 059
DSS 41	A.O.S. 059/0146	L.O.S. 059/1017	COMMANDS 3 RANGING NIL
DEVIATIONS OR ANOMALIES			

0153Z-0159Z 360/75 DOWN, SKED STRING SWAP TO "B"
 2 WAY TRACK
 CMDS XMTD 0401Z-0759Z

PASS 0275	FEB 28,1972	FEB 28,1972	DAY 059 059
DSS 62	A.O.S. 059/0941	L.O.S. 059/1906	COMMANDS 194 RANGING NIL
DEVIATIONS OR ANOMALIES			

1018Z-1906Z 2 WAY
 1034Z-1850Z CMDS XMITTED

PASS 0275	FEB 28,1972	FEB 29,1972	DAY 059 060
DSS 14	A.O.S. 059/1736	L.O.S. 060/0611	COMMANDS 0 RANGING NIL
DEVIATIONS OR ANOMALIES			

TCP B SCI SNR
 ACTUAL 2.8
 PREDIC 3.1
 DIFFER -0.3

PASS 0275	FEB 28,1972	FEB 28,1972	DAY 059 059
DSS 12	A.O.S. 059/2110	L.O.S. 059/2346	COMMANDS 8 RANGING NIL
DEVIATIONS OR ANOMALIES			

MM-9 DATA TAKEN OFF 360 PROCESS FOR PN-F LAUNCH

PASS 0275	FEB 29,1972	FEB 29,1972	DAY 060 060
DSS 41	A.O.S. 060/0143	L.O.S. 060/1021	CGMMANDS 6 RANGING NIL
DEVIATIONS OR ANOMALIES			

DR-N0113, D/L RSID-2.0 DB BELOW PRDX FOR RTS-I
 2 WAY TRACK 0228Z-0950Z
 CMDS XMTD 0330Z-0758Z

PASS 0276 FEB 29,1972 FEB 29,1972 DAY 060 060

DSS 62 A.O.S. 060/0941 L.O.S. 060/1916 COMMANDS 303 RANGING NIL

DEVIATIONS OR ANOMALIES

1736Z-1744Z 360/75 DOWN-STRING SWAP-UP ON "A" STRING
1020Z-1916Z 2 WAY
1035Z-1908Z CMD XMITTED

PASS 0276 FEB 29,1972 MAR 01,1972 DAY 060 061

DSS 14 A.O.S. 060/1734 L.O.S. 061/0610 COMMANDS 22 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B-SCI SNR
ACTUAL 2.6
PREDIC 3.0
DIFFER -0.4
3 WAY NO CMDS
1736Z-1744Z 360/75 DOWN STRING SWAP-UP ON "A"

PASS 0276 FEB 29,1972 MAR 01,1972 DAY 060 061

DSS 12 A.O.S. 060/2110 L.O.S. 061/0155 COMMANDS 22 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 2145Z-0155
CMDS XMIT 2213 TO 0137

PASS 0277 MAR 01,1972 MAR 01,1972 DAY 061 061

DSS 62 A.O.S. 061/0941 L.O.S. 061/1804 COMMANDS 511 RANGING NIL

DEVIATIONS OR ANOMALIES

1003-1007Z 360/75A DOWN, LOCKED OUT OF SYSTEM. RESTART. REF DR 3215
1236Z-1244Z 360/75A DOWN, LOCKED OUT OF SYSTEM. RESTART.
REF DR N 3215
1756Z-1804Z 360/75 DOWN, STRING B SWAP

PASS 0277 MAR 01,1972 MAR 02,1972 DAY 061 062

DSS 14 A.O.S. 061/1732 L.O.S. 062/0540 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP A-ENG SNR TCP B-SCI SNR
ACTUAL 6.2 ACTUAL 2.6
PREDIC 6.4 PREDIC 2.7
RESID -0.2 RESID -0.1
2234Z-0044Z 2WAY. 2208Z-0010Z 12 CMDS
2200Z-0200Z NO 360/75 SUPPORT DUE TO PN-F LAUNCH
05 Z- NAT TEL WROTE DR N 114 DUE TO D/L S/S RESID IN EXCESS
OF PLUS AND MINUS 1.5 DB

PASS 0277 MAR 02,1972 MAR 02,1972 DAY 062 062

 DSS 41 A.O.S. 062/0145 L.O.S. 062/1035 COMMANDS 3 RANGING NIL
 DEVIATIONS OR ANOMALIES

2WAY TRACK. CMDS XMTD AT 0307Z-0619Z

PASS 0278 MAR 02,1972 MAR 02,1972 DAY 062 J62

 DSS 62 A.O.S. 062/0937 L.O.S. 062/1752 COMMANDS 369 RANGING NIL
 DEVIATIONS OR ANOMALIES

1534Z-1752Z (LOS),TCP-A LOST TAPE CAPBL., REF DR T-1880
 2-WAY TRACK 0945Z-1752Z. CMDS XMTD 0959Z-1737Z
 POST TRACK 1017Z, LOST UPLINK AT S/C. UNABLE TO HOLD 11HZ/MIN
 TUNING RATE. REF DR T-1879

PASS 0278 MAR 02,1972 MAR 03,1972 DAY 062 063

 DSS 14 A.O.S. 062/1730 L.O.S. 063/0609 COMMANDS 14 RANGING NIL
 DEVIATIONS OR ANOMALIES

TCP A+ENG SNR TCP B-SCI SNR
 ACTUAL 5.5 ACTUAL 6.0
 PREDIC 4.5 PREDIC 4.6
 RESID -1.0 RESID -2.4
 2209Z-0001Z 2 WAY, 2211Z-2336Z CMDS XMTD
 2150Z-2207Z DIS DOWN, LGWR NOT INCREMENTING,RELOAD REQUIRED
 2200Z STA DATA TAKEN OUT OF SYSTEM DUE TO PN-F LAUNCH

PASS 0278 MAR 03,1972 MAR 03,1972 DAY 063 063

 DSS 41 A.O.S. 063/0141 L.O.S. 063/1200 COMMANDS 119 RANGING NIL
 DEVIATIONS OR ANOMALIES

1048Z-1059Z 360/75 DOWN, DR 3224
 2-WAY TRACK 0224Z-1200Z

PASS 0279 MAR 03,1972 MAR 03,1972 DAY 063 063

 DSS 62 A.O.S. 063/1136 L.O.S. 063/1800 COMMANDS 311 RANGING NIL
 DEVIATIONS OR ANOMALIES

2-WAY 1229Z-1800Z

PASS 0279 MAR 03,1972 MAR 04,1972 DAY 063 064

 DSS 14 A.O.S. 063/1731 L.O.S. 064/0609 COMMANDS 011 RANGING NIL
 DEVIATIONS OR ANOMALIES

1854Z-1913Z DIS LGWR AND LGER NOT UP DATING. STATION THINKS
 THEY HAVE A MAG TAPE PROBLEM (OLD TAPE) CHANGE TAPE AND
 RELOAD DIS.

2123Z-2131Z 360 "A" DOWN, NUMEROUS PROBLEMS. WARM/WARM DR 3229
 0200Z-0206Z 360/75 DOWN DUE TO DOA A.BENDS FOR TTY DISPLAYS
 DR 3232.
 0508Z-0520Z 360/75 DOWN FOR RESTART AND IPL, DR 3233.

PASS 0279 MAR 04, 1972 MAR 04, 1972 DAY 064 064

 DSS 41 A.O.S. 064/0140 L.O.S. 064/1035 COMMANDS 2 RANGING NIL

DEVIATIONS OR ANOMALIES

0156Z-0200Z 360/75 DOWN DUE TO DOA A BENDS ON TTY DISPLAY
 RESTART REG DR 3232
 0508Z-0520Z 360/75 DOWN FOR WARM IPL AND RESTART 2260'S
 LOCKED OUT DR 3233
 0759Z-0805Z 360/75 DOWN SYSTEM SWAP UP ON "B" STRING

PASS 0280 MAR 04, 1972 MAR 04, 1972 DAY 064 064

 DSS 62 A.O.S. 064/0955 L.O.S. 064/1759 COMMANDS 330 RANGING NIL

DEVIATIONS OR ANOMALIES

1155Z-1210Z GODDARD CP DOWN DR 4973
 1128Z-1135Z 360 "B" DOWN FOR RESTART DR 3236
 1250Z-1759Z 360 "B" DOWN, DATA TABLES-WARM WARM DR 3234

PASS 0280 MAR 04, 1972 MAR 05, 1972 DAY 064 065

 DSS 14 A.O.S. 064/1730 L.O.S. 065/0430 COMMANDS 15 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP-A-ENG SNR TCP-B-SCI SNR
 ACTUAL 17.0 ACTUAL 18.3
 PREDIC 12.9 PREDIC 18.9
 DIFFER -0.9 DIFFER -0.6
 2 WAY TRACK: 2115Z TO 0234Z
 CMDS XMIT: 2127Z-0200Z
 1756Z-1759Z 360 "B" DOWN, DATA TABLES, WARM IPL, WARM
 RESTART DR 3234
 1728Z-1935Z TTY (COMM) LINE TO 14-HIGH DISTORTION DR 4975
 2022Z-2047Z TTY (COMM) LINE TO 14-HIGH DISTORTION DR 4976
 2136Z-2150Z DIS DOWN FOR RELOAD
 0404Z-0412Z 360 DOWN, SCHED IPL, NO DR
 0412Z-LOS, NO MM9 DATA AFTER 360 OUTAGE, PEROC
 *EARLY LOS TO SUPPORT PIONEER
 12Z-LOS, NO MM9 DATA AFTER 360 OUTAGE, PEROC
 EARLY LOS TO SUPPORT PIONEER

PASS 0280 MAR 05, 1972 MAR 05, 1972 DAY 065 065

 DSS 41 A.O.S. 065/0140 L.O.S. 065/0950 COMMANDS 2 RANGING NIL

DEVIATIONS OR ANOMALIES

0404Z-0412Z 360 DOWN, SCHED. IPL NO DR
 0412Z-0800Z NO MM9 DATA OFFER 360 OUTAGE, PER O.C.
 0813Z-0827Z 360/75 DOWN-SCHEDULE STRING SWAP

PASS 0281 MAR 05,1972 MAR 05,1972 DAY 065 065

 DSS 62 A.O.S. 065/0931 L.O.S. 065/2157 COMMANDS 357 RANGING NIL
 DEVIATIONS OR ANOMALIES

1047Z-1053Z 360 A DOWN W/W DR 3238
 1443Z-1450Z 360 A DOWN C/W DR 3239
 1640Z-1645Z 360 A DOWN WARM RESTART DR 3236
 APPROX 1630 TO LOS-TCP LGWR AND LGER NOT UPDATING DUE TO DRIFT
 TEST LOW SNK
 1009Z-2157Z 2 WAY 1007Z-2145Z CMDS XMITTED

PASS 0281 MAR 05,1972 MAR 06,1972 DAY 065 066

 DSS 14 A.O.S. 065/1724 L.O.S. 066/0607 COMMANDS 10 RANGING NIL
 DEVIATIONS OR ANOMALIES

TCP A ENG	TCP B SCI	
21.0	18.4	
17.6	18.6	
+ 3.4	+0.2	

2226Z-0224Z 2 WAY 2220Z-2334Z CMDS XMITTED
 2039Z-2048Z 3100 DOWN DR 3021
 2351Z-2337Z 360 A DOWN DR 3236

PASS 0281 MAR 06,1972 MAR 06,1972 DAY 066 066

 DSS 41 A.O.S. 066/0142 L.O.S. 066/1025 COMMANDS 2 RANGING NIL
 DEVIATIONS OR ANOMALIES

360/75 DOWN FOR SYSTEM SWAP
 0224Z-1025Z 2 WAY 0224Z-0920Z CMDS XMITTED

PASS 0282 MAR 06,1972 MAR 06,1972 DAY 066 066

 DSS 62 A.O.S. 066/0929 L.O.S. 066/1807 COMMANDS 316 RANGING NIL
 DEVIATIONS OR ANOMALIES

BIT RATE 50
 TCP-B-SCI
 ACTUAL 9.2
 PREDIC 9.4
 DIFFER -0.2

PASS 0282 MAR 06,1972 MAR 07,1972 DAY 066 067

 DSS 14 A.O.S. 066/1723 L.O.S. 067/0400 COMMANDS 10 RANGING MU
 DEVIATIONS OR ANOMALIES

TCP A-ENG	TCP-B-SCI
ACTUAL 11.2	ACTUAL 4.6
PREDIC 10.8	PREDIC 4.5
DIFFER +0.4	DIFFER +0.1

1846Z-1902Z 360 "B" DOWN-WARM RESTART DR 3236
 0105Z-0112Z 360 "B" DOWN-WARM RESTART DR 3246
 0313Z-0331Z 360 "B" DOWN WARM RESTART DR 3240

PASS 0282 MAR 07,1972 MAR 07,1972 DAY 067 067

DSS 41 A.O.S. 067/0141 L.O.S. 067/1025 COMMANDS 3 RANGING NIL

DEVIATIONS OR ANOMALIES

0313Z-0331Z 360 B DOWN WARM RESTART DR 3248
0432Z-0435Z 360 B DOWN FOR RESTART DR 3249
0806Z-0813Z 360 B DOWN SCHEDULE WARM/WARM RESTART
0815Z- MM9 PROCESS REMOVED FROM 360 FOR PN10 SUPPORT

PASS 0283 MAR 07,1972 MAR 07,1972 DAY 067 067

DSS 62 A.O.S. 067/0928 L.O.S. 067/1947 COMMANDS 285 RANGING NIL

DEVIATIONS OR ANOMALIES

0928Z AOS TO LOS MM9 PROCESS PULLED OUT OF 360 DUE TO
CRITICAL PN10 PERIOD
2-WAY 1009Z-1947Z
CMD 0956Z-1930Z

PASS 0283 MAR 07,1972 MAR 08,1972 DAY 067 068

DSS 14 A.O.S. 067/1925 L.O.S. 068/0605 COMMANDS 5 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK: 0035 TO
CMD XMIT: 2248Z-2346Z
2016Z-2022Z 360/75 DOWN, BACKLOGGING, WARM IPL-RESTART
DR 3249
0148Z-0154Z 360 DOWN, TTY GUIDE TABLE CLOBBED, RESTART
REQ DR 3252

PASS 0283 MAR 08,1972 MAR 08,1972 DAY 068 068

DSS 41 A.O.S. 068/0141 L.O.S. 068/1025 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

0924Z-0931Z 360 "B" DOWN RESTART DR 3253
0242Z-1010Z 2 WAY
0242Z-0915Z CMD XMIT

PASS 0284 MAR 08,1972 MAR 08,1972 DAY 068 068

DSS 62 A.O.S. 068/0926 L.O.S. 068/1800 COMMANDS 273 RANGING NIL

DEVIATIONS OR ANOMALIES

0924Z-0931Z 360/75B DOWN, WARM RESTART, DR 3253
1345Z-1100Z 360/75B DOWN FOR IPL DR 3254
1212Z-1241Z 360/75B DOWN FOR STRING SWAP, WITH WARM START
UP ON "A" STRING DR 3255
1650Z-1654Z 360/75A DOWN ALL PROCESSES HALTED, WARM RESTART
DR 3249
2 WAY TRACK
0959Z-1745Z

PASS 0284 MAR 08,1972 MAR 09,1972 DAY 068 069

DSS 14 A.O.S. 068/1719 L.O.S. 069/0606 COMMANDS 8 RANGING MU

DEVIATIONS OR ANOMALIES

2 WAY TRACK 2188Z-0017Z
ACTUAL 16.2
PREDIC 16.2
DIFFER 0.0
0235Z-0400Z PROCESS OUT OF 360/75A
2 WAY TRACK 2138Z-0017Z

PASS 0284 MAR 09,1972 MAR 09,1972 DAY 069 069

DSS 41 A.O.S. 069/0140 L.O.S. 069/1013 COMMANDS 12 RANGING NIL

DEVIATIONS OR ANOMALIES

0211Z-0217Z DIS HANG-UP RELOAD
0325Z PROCESS OUT OF 360/75A SYSTEM-0400 PROCESS ENTER IN
0959Z-1008Z DTV HUNG-UP
0959Z-1008Z DTV HUNG UP
0226Z-0905Z CMD XMITTED
0226Z-0905Z CMD XMITTED

PASS 0285 MAR 09,1972 MAR 09,1972 DAY 069 069

DSS 62 A.O.S. 069/0924 L.O.S. 069/2142 COMMANDS 310 RANGING NIL

DEVIATIONS OR ANOMALIES

0959Z-1008Z DTV HUNG UP
1102Z-1116Z 360/75A DOWN RESTART REQ DR 3259
1017Z ON TSF 5350 VICE 5340 DR T-1903
1721Z-1725Z 360/75A DOWN BACKLOGGING WARM RESTART DR 3259
1828Z-1836Z 360/75A DOWN DISPLAY TASKS ABEND WARM IPL DR 3259
CMDS XMITTED 1000Z-2121Z

PASS 0285 MAR 09,1972 MAR 10,1972 DAY 069 070

DSS 14 A.O.S. 069/1717 L.O.S. 070/0604 COMMANDS 14 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP A-ENG SNR TCP B-SCI SNR
ACTUAL 14.5 ACTUAL 15.7
PREDIC 15.4 PREDIC 16.4
RESID -0.9 RESID -0.7
1721Z-1725Z 360/75A DOWN,BACKLOGGING,WARM RESTART.REF DR N3259
1828Z-1836Z 360/75A DOWN,DISPLAY TASKS ABENDS,WARM IPL
RESTART DR 3259
0008Z-0016Z 360/75A DOWN, SKED FOR VERSION SWITCH TO V27.3
0022Z-0027Z 360/75A DOWN, BAD LOAD ON VERSION SWITCH
RESTART REQ
2213Z-0053Z 2 WAY
2213Z-0017Z CMD XMITTED

PASS 0285 MAR 10,1972 MAR 10,1972 DAY 070 070

DSS 41 A.O.S. 070/0139 L.O.S. 070/1000 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0286 MAR 10,1972 MAR 10,1972 DAY 070 070

DSS 62 A.O.S. 070/0922 L.O.S. 070/1840 COMMANDS 291 RANGING NIL

DEVIATIONS OR ANOMALIES

1045Z-1053Z 360 A DOWN, WARM RESTART, DR 3269
1315Z-1321Z 360 A DOWN, FOR SCHED. STRING SWAP TO "B" NO DR
1339Z-1344Z 360 B DOWN, DISC SWAP
1825Z-1832Z 360/75B DOWN FOR A DUMP DUE TO SUSPECTED S/W
PROBLEM, UNABLE TO ACCESS SOME TTY'S, RESTART REQ. DR 3275
2 WAY TRACK 0925Z-1843Z
CMDS XMTD 0949Z-1815Z

PASS 0286 MAR 10,1972 MAR 11,1972 DAY 070 071

DSS 14 A.O.S. 070/1715 L.O.S. 071/0603 COMMANDS 7 RANGING MU

DEVIATIONS OR ANOMALIES

TCP B-SCI SNR	TCP B-SCI SNR
ACTUAL 3.0	ACTUAL 15.4
PREDIC 3.5	PREDIC 16.4
DIFFER -0.5	DIFFER -1.0

1715Z-1858Z NO LOG WRITES FROM DIS-LOG TAPE PROBLEM. DR 1906
PROBLEM RESOLVED WITH A RELOAD
2044Z-2047Z GODDARD CP FAULTED, RECOVERY REQUIRED DR 5034
2301Z-2311Z 360/75 B TAKEN DOWN TO INSERT CHANGE IN
VERSION 27.3
0439Z-0443Z 360/75B DOWN; SKED
2 WAY TRACK
CMDS XMTD 2157Z-2343Z

PASS 0286 MAR 11,1972 MAR 11,1972 DAY 071 071

DSS 42 A.O.S. 071/0510 L.O.S. 071/0935 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

0618Z-0935Z 2 WAY
0616Z CMD XMITTED

PASS 0287 MAR 11,1972 MAR 11,1972 DAY 071 071

DSS 62 A.O.S. 071/0928 L.O.S. 071/1851 COMMANDS 292 RANGING NIL

DEVIATIONS OR ANOMALIES

1000Z TO 1851 2-WAY
1603Z TO 1610Z 360/75 DOWN, 2260'S LOCKED OUT, RESTART R/T JOB

PASS 0287 MAR 11,1972 MAR 12,1972 DAY 071 072

DSS 14 A.O.S. 071/1714 L.O.S. 072/0550 COMMANDS 4 RANGING MU

DEVIATIONS OR ANOMALIES

TCP B-SCI SNR	TCP B-SCI SNR
ACTUAL 15.5	ACTUAL 4.3
PREDIC 15.6	PREDIC 5.0
DIFF -0.1	DIFF -0.7

2205Z-2218Z 360/758 DOWN, DR 3218 WARM IPL AND WARM RESTART
0457Z-0512Z 360/758 DOWN, WARM RESTART REQUIRED, DR 3282
2 WAY TRACK 2144Z-0017Z
CMDS XMTD 2253Z-2348Z

PASS 0287 MAR 12,1972 MAR 12,1972 DAY 072 072

DSS 41 A.O.S. 072/0137 L.O.S. 072/1000 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK:0231Z-0619Z. CMD XMT 0520Z
0457Z-0512Z 360 DOWN,WARM RESTART REQUIRED, DR 3282
0747Z-0819Z 360 DOWN FOR STRING SWAP

PASS 0288 MAR 12,1972 MAR 12,1972 DAY 072 072

DSS 62 A.O.S. 072/0921 L.O.S. 072/2143 COMMANDS 278 RANGING NIL

DEVIATIONS OR ANOMALIES

RX 2	TCP A ENG	TCP B SCI
161.2	11.4	2.0
160.4	11.9	5.5
-0.9	-0.5	-3.5

1002Z-2143Z 2 WAY 0953Z-2123Z 278 CMDS
1310Z-1320Z 360/758 DOWN DUE TO H/S PTR DR 3284

PASS 0288 MAR 12,1972 MAR 13,1972 DAY 072 073

DSS 14 A.O.S. 072/1712 L.O.S. 073/0602 COMMANDS 5 RANGING MU

DEVIATIONS OR ANOMALIES

RX 1	TCP A SCI	TCP A SCI
154.7	2.1	3.4
152.9	2.7	4.3
-1.8	-0.6	-0.9

2217Z-0030Z 2 WAY 2158Z-2348Z CMDS XMITTED

PASS 0288 MAR 13,1972 MAR 13,1972 DAY 073 073

DSS 41 A.O.S. 073/0136 L.O.S. 073/1010 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

0216Z-0955Z 2 WAY 0614Z CMDS XMITTED
0606Z-0627Z 360 DOWN SOFTWARE/HARDWARE PROBLEMS DR 3288

PASS 0289 MAR 13,1972 MAR 13,1972 DAY 073 073

 DSS 62 A.O.S. 073/0917 L.O.S. 073/1821 COMMANDS 237 RANGING NIL
 DEVIATIONS OR ANOMALIES

0955Z-1821Z 2 WAY 0945Z-1811Z 237 CMDS
 1123Z-1124Z HSD LOST DUE TO GODDARD C/P FAIL DR 5051
 1649Z-1656Z DIS HUNG UP AND RELOADED NO DR

PASS 0289 MAR 13,1972 MAR 14,1972 DAY 073 074

 DSS 14 A.O.S. 073/1710 L.O.S. 074/0601 COMMANDS 5 RANGING MU
 DEVIATIONS OR ANOMALIES

TCP B SCI
 3.8
 4.4
 -0.6
 1721Z DIS LOG WRITE ERRORS HIGH DUE TO PROB ENCOUNTERED DURING
 DATA XFER TEST NO DR
 2351Z-0008Z 360/75 DOWN 2260'S LOCKED OUT WARM RESTART DR 3294
 0151Z-0157Z 360/75 DOWN RESTART REQ DR 3296
 0307Z-0309Z 3100 DOWN STOPPED UPDATING RESTART DR 3297
 0333Z-0338Z 3100 DOWN STOPPED UPDATING RESTART REQ REF DR 3297
 2157Z-2345Z 2 WAY 2154Z-2340Z CMDS XMITTED

PASS 0289 MAR 14,1972 MAR 14,1972 DAY 074 074

 DSS 41 A.O.S. 074/0134 L.O.S. 074/1000 COMMANDS 3 RANGING NIL
 DEVIATIONS OR ANOMALIES

2 WAY 0302Z-0733Z AND 0749Z-0755Z AND 0805Z-0919Z
 CMDS XMITTED 0545Z-0612Z
 0151Z-0157Z 360 DOWN RESTART REQ DR 3296
 0307Z-0309Z AND 0333Z-0338Z 3100 STOPPED UPDATING RESTART DR
 3297
 0428Z-0430Z HSD DOWN BETWEEN CANBERRA AND DSS-41 DR C-5055

PASS 0290 MAR 14,1972 MAR 14,1972 DAY 074 074

 DSS 62 A.O.S. 074/0916 L.O.S. 074/2137 COMMANDS 368 RANGING NIL
 DEVIATIONS OR ANOMALIES

0922Z-0936Z 360 DOWN WARM/WARM DR 3301
 1621Z-1628Z 360 DOWN DUE TO BACKLOG WARM IPL DR 3296
 0955Z-2137Z 2 WAY

PASS 0290 MAR 14,1972 MAR 15,1972 DAY 074 075

 DSS 14 A.O.S. 074/1709 L.O.S. 075/0601 COMMANDS 14 RANGING NIL
 DEVIATIONS OR ANOMALIES

TCP B SCI
 3.4
 3.9
 -0.5

2103Z-2156Z DIS STOPPED UPDATING DR 0135
0143Z-0156Z 360/75A DOWN DR 3307

PASS 0290 MAR 15,1972 MAR 15,1972 DAY 075 075

DSS 41 A.O.S. 075/0132 L.O.S. 075/0953 COMMANDS 63 RANGING NIL

DEVIATIONS OR ANOMALIES

J245Z-J953Z 2 WAY 0230Z-J829Z CMDS XMIT
0143Z-0456Z 360 DOWN IPL WARM DR 3307
0240Z-0241Z HSD DOWN GSFC-JPL DR 5064
0700Z-0706Z 360 DOWN WARM IPL DR 3308

PASS 0291 MAR 15,1972 MAR 15,1972 DAY 075 075

DSS 62 A.O.S. 075/0913 L.O.S. 075/2245 COMMANDS 57 RANGING NIL

DEVIATIONS OR ANOMALIES

1710Z-1722Z 360 STRING SWAP A TO B DR 3311
2131Z-2144Z 360/75 DOWN BACKLOG 2260'S OUT IPL DR 3312

PASS 0291 MAR 15,1972 MAR 16,1972 DAY 075 076

DSS 14 A.O.S. 075/1707 L.O.S. 076/0600 COMMANDS 27 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B SCI
 4.3
 4.4
 -0.1
1710Z-1722Z 360 SWAP DR 3311
0437Z-0559Z 2 WAY 2300Z-0530Z CMDS XMITTED

PASS 0292 MAR 16,1972 MAR 16,1972 DAY 076 076

DSS 62 A.O.S. 076/0912 L.O.S. 076/1820 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

J958Z-1743Z 2 WAY
1046Z-1100Z 360/75 DOWN DUE ERRORS ON MSB PACK DR 3314

PASS 0292 MAR 16,1972 MAR 17,1972 DAY 076 077

DSS 14 A.O.S. 076/1706 L.O.S. 077/0559 COMMANDS RANGING MU
DSS 14 A.O.S. 076/1706 L.O.S. 077/0559 CCMMANDS RANGING MU

DEVIATIONS OR ANOMALIES

2008Z DIS LOG TAPE HUNG UP. DIS TAKEN FOR REMAINDER
OF TRACK IN AN ATTEMPT TO CORRECT PROBLEM.
0219Z-0236Z 360/75B DOWN FOR IPL . REF DR N 3316

PASS	0292	MAR 17,1972	MAR 17,1972	DAY 077	077
DSS 42	A.O.S. 077/0544	L.O.S. 077/0915	COMMANDS 0	RANGING NIL	
DEVIATIONS OR ANOMALIES					
1-WAY PASS					

PASS	0293	MAR 17,1972	MAR 17,1972	DAY 077	077
DSS 62	A.O.S. 077/0911	L.O.S. 077/1805	COMMANDS 5	RANGING NIL	
DEVIATIONS OR ANOMALIES					
1510Z-1526Z 360 DOWN WARM/WARM DR 3319					

PASS	0293	MAR 17,1972	MAR 18,1972	DAY 077	078
DSS 14	A.O.S. 077/1703	L.O.S. 078/0558	COMMANDS 36	RANGING NIL	
DEVIATIONS OR ANOMALIES					
TCP B-SCI ACTUAL 2.6 PREDICTED 3.7 RESID -1.1 DIS DOWN TO CORRECT LGWR PROBLEM. REF DR N-0135 1932Z-1944Z 360/758 DOWN,ERRONEOUS T MED,ENTERED WARM IPL/RESTART, DR 3323 2 WAY TRACK 1801Z-0558Z CMDS XMITTED 1800Z-0510Z					

PASS	0293	MAR 18,1972	MAR 18,1972	DAY 078	078
DSS 42	A.O.S. 078/0520	L.O.S. 078/0915	COMMANDS 0	RANGING NIL	
DEVIATIONS OR ANOMALIES					
NO P/RESIDS DUE TO 360 SOFTWARE PROBLEMS REF DR N-0140 1 WAY PASS					

PASS	0294	MAR 18,1972	MAR 18,1972	DAY 078	078
DSS 62	A.O.S. 078/0909	L.O.S. 078/1730	COMMANDS 186	RANGING NIL	
DEVIATIONS OR ANOMALIES					
2 WAY TRACK 0913Z-1730Z CMDS XMTD 1025Z-1715Z					

PASS	0294	MAR 18,1972	MAR 19,1972	DAY 078	079
DSS 14	A.O.S. 078/1701	L.O.S. 079/0557	COMMANDS 18	RANGING MU	
DEVIATIONS OR ANOMALIES					
1707Z TCP-A PROGRAM BOMBED, RELOAD REQ., DR T-1938 2241Z, 2255Z, 360/758 DOWN, 2260'S LOCKEDOUT, WARM IPL/RESTART DR 3326					

PASS 0294 MAR 19,1972 MAR 19,1972 DAY 079 079

 DSS 42 A.O.S. 079/0540 L.O.S. 079/0918 CGMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

0802Z-0855Z 360/75B DOWN FOR STRING SWAP, UNABLE TO MAKE
 SWAP DR 3329
 NO PSEUDO-RESIDUALS DUE TO TOP 3-WAY CODE WHEN ACTUALLY 1-WAY
 TRACK
 1-WAY TRACK

PASS 0295 MAR 19,1972 MAR 19,1972 DAY 079 079

 DSS 62 A.O.S. 079/0911 L.O.S. 079/1730 COMMANDS 93 RANGING NIL
 DEVIATIONS OR ANOMALIES

1108Z-1116Z 360/75B DOWN FOR STRING SWAP
 DR N-0141 ON D/L AND SNR RSID BELOW PRDX
 2 WAY TRK 0912Z-1730Z
 CMDS XMTD 0941Z-1725Z

PASS 0295 MAR 19,1972 MAR 20,1972 DAY 079 080

 DSS 14 A.O.S. 079/1659 L.O.S. 080/0556 COMMANDS 27 RANGING MU
 DEVIATIONS OR ANOMALIES

1803Z-1820Z XMTR, FAILURE, TFR, B04548 AND DR T-1941 REFERS
 1853Z-0556Z 2 WAY
 1853Z-0530Z CMD XMITTED

PASS 0295 MAR 20,1972 MAR 20,1972 DAY 080 080

 DSS 42 A.O.S. 080/0539 L.O.S. 080/0915 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

NO PSEUDO/RESIDUALS DUE TO 3-WAY TOP CODE WHEN ACTUALLY 1 WAY

PASS 0296 MAR 20,1972 MAR 20,1972 DAY 080 080

 DSS 62 A.O.S. 080/0906 L.O.S. 080/1947 CCMMANDS 1 RANGING NIL
 DEVIATIONS OR ANOMALIES

RELEASED EARLY, PROJECT CANX 2 WAY TRA SFER
 2 WAY TRACK 1910Z-1937Z
 CMDS XMTD 0942Z-1655Z

PASS 0296 MAR 20,1972 MAR 21,1972 DAY 080 081

 DSS 14 A.O.S. 080/1657 L.O.S. 081/0556 COMMANDS 22 RANGING NIL
 DEVIATIONS OR ANOMALIES

1953-1959Z 360/75 A DOWN WARM RESTART DR 3333
 2314-2340Z 360/75 A DOWN CORE FRAG. WARM IPL RESTART DR 3333

0156-0202Z 360/75 A DOWN WARM RESTART DR 3337
 0440-0447Z 360/75 A DOWN RESTART REQUIRED DR 3338
 0522-0528Z 360/75 A DOWN RESTART REQUIRED DR 3339
 0554-0610Z 360/75 A DOWN RESTART AND IPL REQUIRED DR 3340
 2223-0556Z 2 WAY
 2234-0546Z COMMANDS XMITTED

PASS 0297 MAR 21,1972 MAR 21,1972 DAY 081 081

 DSS 62 A.O.S. 081/0905 L.O.S. 081/2030 COMMANDS 59 RANGING NIL

DEVIATIONS OR ANOMALIES

1738Z-1750Z 360/75 DOWN.REASON UNKNOWN,NO DR.
 1807Z-1811Z,H50 TTY AND VOICE LINES DOWN, REF.DR 5130
 2 WAY TRACK 0908Z-2130Z,0939Z-2104Z CMDS XMTD

PASS 0297 MAR 21,1972 MAR 22,1972 DAY 081 082

 DSS 14 A.O.S. 081/1655 L.O.S. 082/0555 COMMANDS 57 RANGING NIL

DEVIATIONS OR ANOMALIES

TCP B SCI
 12.6
 13.8
 -1.2
 1738Z-1750Z 360/75A DOWN REASON UNKNOWN NO DR
 2255Z-2309Z 360/75A DOWN 2260'S LOCKED OUT WARM IPL
 RESTART, DR 3346
 0114Z-0130Z 360/75A DOWN, 2260'S LOCKED OUT, WARM IPL/
 RESTART DR 3348
 2248Z-0555Z 2 WAY
 2313Z-0545Z CMD XMITTED

PASS 0298 MAR 22,1972 MAR 22,1972 DAY 082 082

 DSS 62 A.O.S. 082/0906 L.O.S. 082/2041 COMMANDS 364 RANGING NIL

DEVIATIONS OR ANOMALIES

0916Z-0948Z 360/75A DOWN, SYS BACKLOGGED, RESTART DR 3349
 *RELEASED BY T/C AFTER 2 WAY XFER
 2 WAY TRACK 0907Z-2035Z
 CMDS XMTD 0941Z-2026Z

PASS 0298 MAR 22,1972 MAR 23,1972 DAY 082 083

 DSS 14 A.O.S. 082/2030 L.O.S. 083/0555 COMMANDS 16 RANGING MU

DEVIATIONS OR ANOMALIES

* TCP B-SCI
 ACTUAL 10.8
 PREDIC 11.9
 DIFFER -1.1
 *RANGING TURNED OFF AND ON
 LATE AOS DUE TO ECO ON 400KW XMTR, NO D/XFER TEST
 0013Z-0025Z 360A DOWN, DTV BACKLOG, 2260 LOCKOUT, WARM
 RESTART DR 3333
 0235Z-0252Z 360 A DOWN, OUT OF CORE, WARM RESTART DR 3354

PASS 0299 MAR 23,1972 MAR 23,1972 DAY 083 083

 DSS 62 A.O.S. 083/0902 L.O.S. 083/2220 COMMANDS 100 RANGING NIL
 DEVIATIONS OR ANOMALIES

1450Z-1505Z 360/75A DOWN EARLY FOR SKED IPL WARM/WARM. SOFTWARE
 SOFTWARE PROBLEM ENCOUNTERED DR 3355
 2200Z EOT. HSDL RELEASED: MONITOR READINGS REFLECT 2100Z
 GROUND RECEIVERS GLITCHING IN RTS-1 MODE
 COMMAND/UPLINK ANOMALY UNDER INVESTIGATION PER P/T

PASS 0299 MAR 23,1972 MAR 24,1972 DAY 083 084

 DSS 14 A.O.S. 083/1652 L.O.S. 084/0554 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

0034Z-0051Z 360 A DOWN BACKLOG AND LOCKOUT RTJS DR 3358

PASS 0300 MAR 24,1972 MAR 24,1972 DAY 084 084

 DSS 62 A.O.S. 084/0902 L.O.S. 084/1932 COMMANDS 165 RANGING NIL
 DEVIATIONS OR ANOMALIES

0939Z-1832Z 2 WAY
 1452Z-1822Z CMDS XMITTED

PASS 0300 MAR 24,1972 MAR 25,1972 DAY 084 085

 DSS 14 A.O.S. 084/1651 L.O.S. 085/0553 COMMANDS 8 RANGING NIL
 DEVIATIONS OR ANOMALIES

1820Z-ROL, TIMING GLITCH ON M.E., DR N-0143 REFERS
 0348Z-0354Z 360 DOWN, COLD RESTART, DR 3366
 0536Z, XMTR OFF, ON AT 0538Z, COLLECTOR FLOW INTERLOCK, TFR
 801769, DR T-1955
 2 WAY TRACK 2225Z-0536Z
 CMDS XMTD 2229Z-0537Z

PASS 0301 MAR 25,1972 MAR 25,1972 DAY 085 085

 DSS 62 A.O.S. 085/1130 L.O.S. 085/1430 COMMANDS 0 RANGING NIL
 DEVIATIONS OR ANOMALIES

STA. HAD INTERMITTENT LOCK ONLY, DUE LOW GAIN ANT, NO DATA
 RECO.
 PROJ RELEASED STA. EARLY, UNABLE TO REC DATA.
 1127Z-1143Z 360/75A DOWN FOR SKED. STRING SWAP TO "B"

PASS 0301 MAR 25,1972 MAR 26,1972 DAY 085 086

 DSS 14 A.O.S. 085/1649 L.O.S. 086/0552 COMMANDS 13 RANGING MU
 DEVIATIONS OR ANOMALIES

1810Z-1855Z DROPPED UPLINK MAG UNDERCURRENT PROB IN HEAT
EXCHANGES DR T-1956
0425Z-0438Z 360 "B" DOWN 2260 LOCKOUT WARM DR 3371

PASS 0302 MAR 26,1972 MAR 27,1972 DAY 086 087

DSS 14 A.O.S. 086/1647 L.O.S. 087/0551 COMMANDS 168 RANGING NIL

DEVIATIONS OR ANOMALIES

PASS 0303 MAR 27,1972 MAR 28,1972 DAY 087 088

DSS 14 A.O.S. 087/1646 L.O.S. 088/0227 COMMANDS 26 RANGING NIL

DEVIATIONS OR ANOMALIES

1826Z-1903Z STA LOST TIME SYST DR 7-1957
DR T-1960 DELAY IN CMDING DUE TO EXCITER FAIL CAUSED BY
SCH COMMERCIAL PWR OUTAGE
DR T-1959 STA LEFT CMD MOD ON WITH TXR OFF
DR T-1956 HIGH DOP RESID

PASS 0304 MAR 28,1972 MAR 28,1972 DAY 088 088

DSS 62 A.O.S. 088/0853 L.O.S. 088/1755 COMMANDS 3 RANGING NIL

DEVIATIONS OR ANOMALIES

1014Z-1021Z DIS DOWN, HUNG UP, RELOAD REQ, NO DR
1036Z-1038Z ANTENNA EMERG. STOP, REASON UNKNOWN, REF.
DR T-1961
1200Z-1036Z; 1203Z-1755Z 2 WAY
1203Z-1750Z CMD XMITTED

PASS 0304 MAR 28,1972 MAR 29,1972 DAY 088 089

DSS 14 A.O.S. 088/1710 L.O.S. 089/0550 COMMANDS 1 RANGING NIL

DEVIATIONS OR ANOMALIES

1930Z-1931Z DSS 14 TXR KICKED OFF RE: DR T 1995
0234Z-0259Z 360 "A" DOWN, POWER FAILURE (COMPUTER) STRING
SWAP TO "B" DR 3381

PASS 0305 MAR 29,1972 MAR 29,1972 DAY 089 089

DSS 62 A.O.S. 089/1401 L.O.S. 089/2225 COMMANDS 90 RANGING NIL

DEVIATIONS OR ANOMALIES

1452Z-2225Z 2 WAY
1452Z-2200Z CMD XMITTED

PASS 0305 MAR 29,1972 MAR 30,1972 DAY 089 090

DSS 14 A.O.S. 089/1646 L.O.S. 090/0549 COMMANDS 21 RANGING NIL

DEVIATIONS OR ANOMALIES

0041Z-0105Z 3100 DOWN, DUE TO 360/75B TIME OUTS
0057Z-0105Z 360/75B DOWN, RE-IPL REF DR 3386
2 WAY TRACK 2225Z-0335Z
CMDS XMTD 0115Z-0125Z

PASS 0306 MAR 30,1972 MAR 30,1972 DAY 090 090

DSS 62 A.O.S. 090/1400 L.O.S. 090/2225 COMMANDS 171 RANGING NIL

DEVIATIONS OR ANOMALIES

2 WAY TRACK 1459Z TO 2225
CMD XMIT 1648Z-2159Z
1938Z-1950Z 360 DOWN FOR RELOAD, REF DR 3354
D/L AND SNR TO NEAR TH. TO BE VALID

PASS 0306 MAR 30,1972 MAR 31,1972 DAY 090 091

DSS 14 A.O.S. 090/1641 L.O.S. 091/0549 COMMANDS 36 RANGING NIL

DEVIATIONS OR ANOMALIES

* VALUES ARE HIGH GAIN LOW GAIN
0436Z-0455Z 400 KW XMTR PROBLEMS NO DR
0230Z-0245Z 360/75 DOWN, LOCKED OUT, RE-IPL W/W REF 3393
0230Z-0245Z 360/75 DOWN, LOCKED OUT, RE-IPL W/W REF DR 3393
2 WAY TRACK 2258Z
CMDS 2300Z-0530Z

GLOSSARY

AOS	acquisition of signal	IRR	infrared radiometer
BDA	Block Decoder Assembly	JPL	Jet Propulsion Laboratory
BFS	B frame start	KA	cone angle
CA	clock angle	LOS	loss of signal
CC	coded command	MDR	master data record
CC&S	central computer and sequencer	MM'71	Mariner Mars 1971
CCTV	closed-circuit television	MOI	Mars orbit insertion
CME	celestial mechanics experiment	N	nadir
CP	Communications Processor	N/A	not applicable; not available
CPS	Central Processing System	NASA	National Aeronautics and Space Administration
DC	direct command	NAT	Network Analysis Team
DIS	Digital Instrumentation Subsystem	ODR	original data record
DL	downlink	PET	probe ephemeris tape
DOY	day of year	PLBK	playback
DR	discrepancy report	PTT	project tracking tape
DSN	Deep Space Network	QC	quantitative command
DSS	Deep Space Station	RF	radio frequency
DSS 12	Echo Deep Space Station, Goldstone, California	S/C	spacecraft
DSS 14	Mars Deep Space Station, Goldstone, California	SCT	SFOF Communications Terminal
DSS 41	Woomera Deep Space Station, Island Lagoon, Australia	SDR	System Data Record
DSS 42	Weemala Deep Space Station, Canberra, Australia	SFOF	Space Flight Operations Facility
DSS 51	Johannesburg Deep Space Station, Johannesburg, South Africa	SNR	signal-to-noise ratio
DSS 62	Cebreros Deep Space Station, Madrid, Spain	SSA	Symbol Synchronization Assembly
DTS	Digital Tracking Subsystem	TCP	Telemetry and Command Processor
DTV	digital television	TDA	tracking and data acquisition
ECO	engineering change order	TDH	Tracking Data Handling Subsystem
FS	fast slew	TDS	Tracking and Data System
GCF	Ground Communications Facility	TSF	tracking synthesizer frequency
GMT	Greenwich Mean Time (Zulu time)	TTY	teletype
HGA	high-gain antenna	TV	television
HSD	high-speed data	UL	uplink
HSDL	high-speed data line	UVBL	ultraviolet bright limb
I/O	input/output	UVPM	ultraviolet pressure mapping
IPL	initial program load	UVS	ultraviolet spectrometer
IRIS	infrared interferometer spectrometer	VCO	voltage-controlled oscillator
		VSF	variable surface features
		XMIT	transmit
		Z	zenith; zulu time (GMT)